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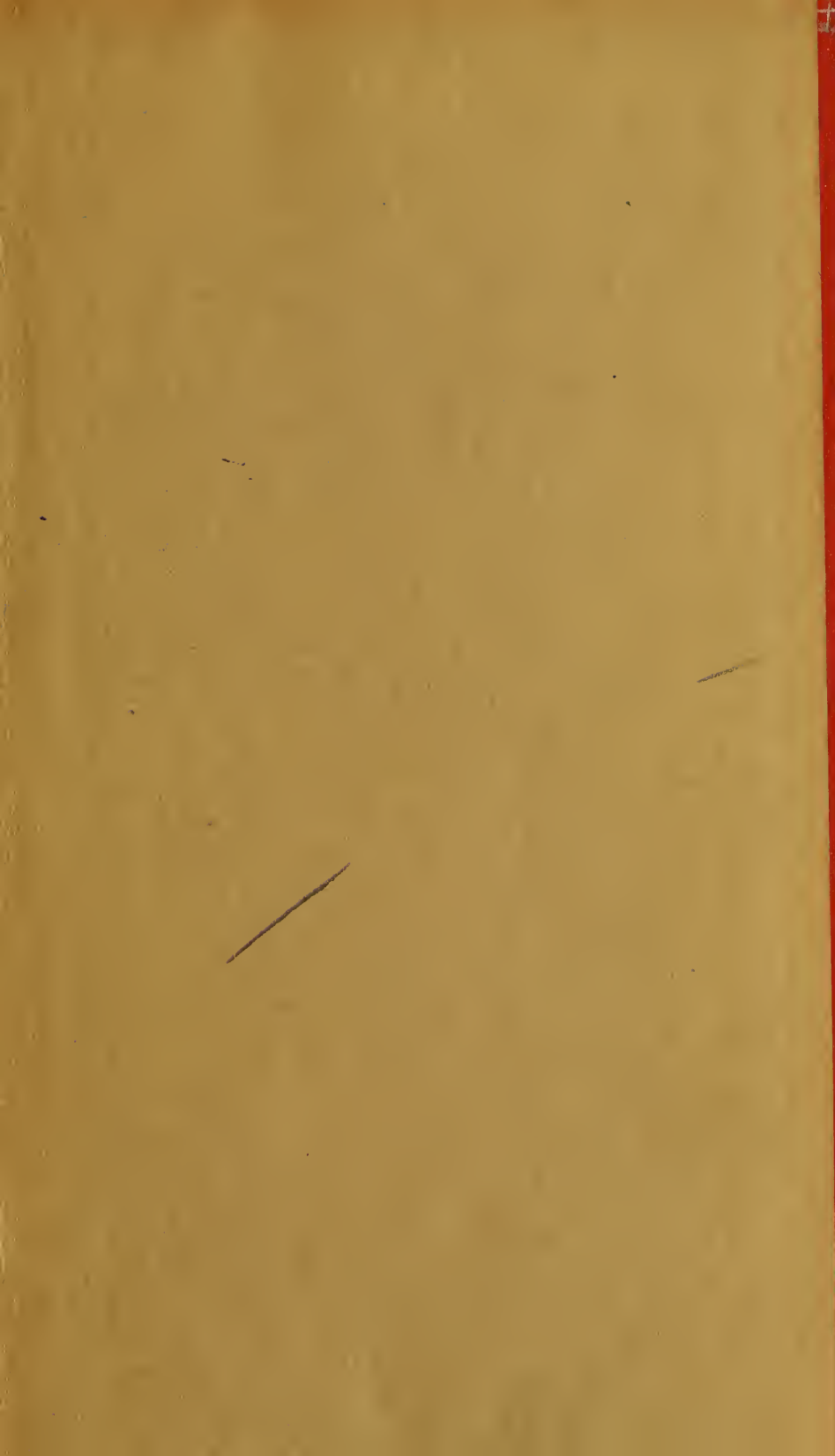
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ANNUAL REPORT
OF THE
FIRE DEPARTMENT
OF THE
CITY OF BOSTON
FOR THE
YEAR ENDING 31 JANUARY, 1913



CITY OF BOSTON
PRINTING DEPARTMENT
1913



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ANNUAL REPORT
OF THE
FIRE DEPARTMENT
FOR THE YEAR 1912-13.

Boston, 1 February, 1913.

HON. JOHN F. FITZGERALD,
Mayor of the City of Boston:

DEAR SIR,—In accordance with section 24, Revised Ordinances, 1898, City of Boston, I have the honor to submit herewith report of this department for the year, 1 February, 1912, to 1 February, 1913.

Appended are reports of the Chief of Department and the heads of the different branches; tables giving in detail the organization, work and cost of these branches; fire statistics for the year; location and valuation of department buildings; valuation of property in charge of the department; description of apparatus; roll of merit; changes in personnel, and treasurer's report of the Relief Fund.

FINANCES.

The cost of maintenance, including all branches, was \$1,726,116.53, an increase over 1911-12 of \$113,721.22.

This increase was accounted for as follows, none of which could be avoided:

Annexation of Hyde Park	\$24,000 00
Increased pay	61,000 00
Pay of additional men	13,800 00
Increased price of hay, grain and straw	13,800 00
Increased price of coal	7,600 00
New boilers, Engine 44, left over from 1911	15,000 00
	<hr/>
	\$135,200 00
	<hr/>

Aside from unavoidable increases the maintenance cost was \$21,500 less than last year.

The expenditure for permanent improvements under special appropriations was \$91,485.83. This included

New fire station and wharf at Northern Avenue	
Bridge for Engine 44	\$29,038 62
New fire station at Oak square, Brighton	35,658 49
Improvements in fire alarm construction	*17,514 96
Purchase of motor apparatus	†8,005 45
Additional construction in Repair Shop	1,268 58

FIRE FIGHTING FORCE.

There are 961 permanent men assigned to duty in the fire fighting force as compared with 914 in 1911, an increase of 47.

There are 116 employees in all other branches.

During the year there have been fifteen retirements for age and disability. This covers the criticism of the department made two years ago by the National Board of Fire Underwriters.

In line with the country-wide movement the salaries of members of all grades were increased during the year, as follows:

Privates, from \$1,200 to \$1,300.
 Engineers, from \$1,300 to \$1,400.
 Lieutenants, from \$1,400 to \$1,600.
 Captains, from \$1,600 to \$1,800.
 District chiefs, from \$2,000 to \$2,300.
 One deputy chief, from \$2,500 to \$2,800.

* \$24,000 additional has been contracted for, but not yet paid.

† \$35,000 additional has been contracted for, but not yet paid.

DETAILED MEN.

Members of the department heretofore permanently detailed to the fire alarm and the repair shop have been transferred to those respective branches, so that hereafter each branch of the department will show the actual number of men employed therein. Previously the cost of these men was borne by the fire fighting force while their services were rendered elsewhere.

DISTRICT LINES.

The boundary lines of the fire districts have been rearranged to remove any uncertainty as to the responsibility and authority of district chiefs.

CHAUFFEURS' SCHOOL.

At the school of instruction for chauffeurs an elaborate equipment has been installed. It consists of an automobile chassis with the working parts exposed to view of the students (loaned to the department through the courtesy of the Studebaker Company), and a demonstrating automobile which is set up on a testing plant; by this means the student becomes thoroughly acquainted with the handling of the speed or transmission levers without liability of accident. The instruction consists of lectures by a professor of gas engineering from Worcester Polytechnic Institute, practical demonstration of automobile construction, practice on testing plant, and is completed with road work on a piece of motor fire apparatus.

INSPECTIONS.

There have been 19,408 inspections of schoolhouses, theatres, motion picture houses, buildings, etc.

There have been issued 3,248 permits for fires in the open air, blasting, storage and transportation of dynamite, storage, sale and discharge of fireworks, under authority given by statute, ordinance or delegated by the district police.

There have been 126 applications for gasoline licenses passed upon by this department.

NEW REGULATIONS.

A board has been appointed to revise and bring up to date the regulations which govern the department. That board is now ready to report.

CIVIL SERVICE.

The extension to this department by the Civil Service Commission of promotion only by competitive examination is, in my opinion, the fairest and most efficient method that can be devised. There have been quite a number of complaints of injustice to individuals which have some warrant in fact, but they are matters that can be adjusted at the next examination, and I have no doubt will then be remedied by the Civil Service Commission.

CONSTRUCTION, SUPPLIES AND REPAIRS.

There are now in service, or in course of construction, five motor-driven combination chemical and hose wagons, four motor-driven city service hook and ladder trucks, and twelve chiefs' runabouts. These will be placed in the suburbs where the runs are long, namely, Orient Heights (East Boston), Dorchester, West Roxbury, Hyde Park, Brighton, and the Parker Hill section of Roxbury. They will add materially to the efficiency of the department.

COMPARATIVE COST — MOTOR APPARATUS.

A careful study has been made of the comparative cost of motor and horse-drawn apparatus. The figures are very interesting and do not agree with those given by the builders of motor apparatus. These figures show that in large cities, where the apparatus is called upon to respond to alarms frequently, the cost of upkeep, including interest on the original investment, is greater than the cost of a similar piece of horse-drawn apparatus.

EXAMPLE 1.

Cost of motor-driven combination chemical and hose wagon,
\$5,500.

Interest, 5 per cent, for one year	\$275 00
Repairs	38 00
Supplies and tires	390 00
Total	<u>\$703 00</u>

EXAMPLE 2.

Cost of motor-driven combination chemical and hose wagon, \$5,500.	
Interest, 5 per cent, for one year	\$275 00
Repairs	315 00
Supplies and tires	574 00
Total	<u>\$1,164 00</u>

EXAMPLE 3.

Cost of hose wagon, harness and two horses, \$1,500.	
Interest, 5 per cent, for one year	\$75 00
Repairs, harness and wagon, rubber tires	100 00
Hay, grain, shoeing, two horses	400 00
Total	<u>\$575 00</u>

The balance in one case is in favor of horse-drawn apparatus by \$133, and in the other case by \$589.

This, of course, does not take into consideration efficiency, nor the fact that the department gains the services of the driver as an addition to the fire fighting force.

FIREPROOF VAULT FOR RECORDS.

A fireproof vault has been built in the repair shop in which to store all valuable books, papers and records.

FIRE ALARM.

By reference to the report of the superintendent of this branch it will be seen that many improvements have been made toward bringing it up to date. There still remain a number of changes to be made in the office, which will be completed before another year. The question of underground cable construction is a serious one, and the city must prepare now to meet it. This is taken up in detail in the recommendations made later in this report.

LOSS PER ALARM AND PER CAPITA.

During the fiscal year there were 811 more alarms than in the previous year. The loss per alarm was \$459 in 1912 as against \$507 in 1911, and an average of \$650 during the last fifteen years.

The per capita fire loss for the fiscal year was \$2.81 as against an average for the past ten years of \$3.58.

ADMINISTRATION.

Filing and Correspondence.

The headquarters have been rearranged and modern methods of correspondence and bookkeeping have been introduced, the card system has been extended and the flat filing system installed, all of which should prove to be a great saver of time. The same system will be introduced into the different branches during the coming year. It is the intention to have one standard throughout the department.

Compilation of Statutes and Ordinances.

The statutes and ordinances bearing on this department have been compiled by Capt. Martin A. Kenealy of Engine 43, and are now in the hands of the printer. They will be distributed to the department. This is a most important work, as heretofore there was nothing to show the power, authority and responsibility of the Fire Commissioner or the Fire Department under the law.

General Orders.

A system of issuing general orders has been instituted, which gives prompt notice to the department of all matters of administration on which it should be informed. This method does away with a great deal of unnecessary work.

Specifications for Motor Apparatus.

An important work has been accomplished in drawing up specifications for automobile fire apparatus, and the testing of the same. They have been used as a model by other cities of the country.

Permits.

The forms of permits have been revised to conform to the city ordinances and the method of recording and issuing them has been improved.

Fire Prevention.

The attention of fire departments throughout the country for the past two or three years has been drawn to the matter of fire prevention as well as fire extinguishment. This is in line with all modern science in looking to the prevention as well as the cure. The figures of the annual fire loss in this country are appalling. The

more so when it is realized that at least 70 per cent of the loss is from preventable fires. Why the subject has remained so long quiescent is beyond comprehension. The only explanation is the entire unfamiliarity of the average citizen with the subject.

There were 4,522 fires in Boston last year; three-quarters of these were caused by carelessness and lack of proper regulations. A comprehensive plan of regulation would save the city over a million dollars a year. Such a plan should be immediately adopted.

At present the power and authority to regulate matters looking toward the prevention of fire is scattered among seven different departments; none of them responsible for fire matters as a whole; most of them without sufficient men to enforce such authority as they have, and the Fire Department, which has the greatest knowledge and experience in such matters, has the least authority of all.

The Fire Commissioner of Boston has recently served as a member of the Metropolitan Fire Hazard Commission, appointed by the Governor of the Commonwealth. This commission has been sitting twice a week since last August, and has had before it fire chiefs, fire prevention engineers, hydraulic engineers, real estate experts, architects, state police, chemists, builders, insurance men, and other men conversant with fire hazards. The commission has listened to their opinions, advice and suggestions, and has reported a bill to the Legislature. This bill asks for legislation on the fire hazard for the whole metropolitan district. Had the legislation pertained to the City of Boston alone, I believe it could have gone much further; therefore, as an official of the city, I deem it my duty to give to the city the benefit of the information I have received as a member of that commission. I submit the following recommendations:

1. Within the building limits a section should be set off where, in the future, only first-class construction should be allowed. This section should be bounded as follows:

Starting at the intersection of Berkeley and Boylston streets, easterly through Boylston street on both sides, to Tremont street, to Park street, to Beacon street, to Bowdoin street, to Ashburton place, to Somerset street, to Pemberton square all sides, to Cornhill, to Adams square, to Exchange street both sides, to State street

both sides, to the waterfront, thence southeasterly along the waterfront to the easterly extension of Kneeland street, to Eliot street, to Columbus avenue both sides, to Berkeley street both sides, to Boylston street, the point of beginning.

Scattered through this section are already standing many first-class buildings, and it would seem that the city as a whole would derive much benefit without working any great hardship on the individual.

2. The building or fire limits should be extended to include all of Charlestown, all of South Boston, all that part of East Boston south and west of Trumbull street, and all that part of Boston north and east of a line beginning at the intersection of the extension of Columbia road and the Old Harbor, then southwesterly through Columbia road to Blue Hill avenue, to Seaver street, to Columbus avenue, to Atherton street, to Mozart street, to Chestnut street, to Sheridan street, to Centre street, to Perkins street, to South Huntington avenue, to Castleton street, to the Brookline boundary line.

3. That no more wooden roofs be allowed to be built anywhere in the city.

4. That in all dwellings housing more than one family all construction below the first floor be fire resistive.

5. That in all tenement houses there be no connection between the first floor and basement.

6. That all buildings of five stories or more in height be of fire resistive construction.

7. That fire escapes run to roofs when so ordered by the Fire Commissioner.

8. That all window openings to fire escapes be either cut down to the level of the fire escape platform, or permanent steps be built so as to facilitate getting out of windows onto fire escapes.

9. That all signs hereafter erected on buildings be subject to approval by the Fire Department.

10. That in all repairs and additions to third-class construction the size of the building be not increased over 10 per cent.

11. That the Fire Commissioner be a member of the Board of Appeal.

12. That the School Committee be required to provide a course for the study of fire prevention in the schools, for fifteen minutes each week. This is done in several cities.

13. That in buildings of second and third class construction no horses be allowed to be kept above the first floor unless there are two means of egress.

14. That the sale of stove polish containing benzine, gasoline, naphtha or inflammable fluids be prohibited.

15. That where chimney fires occur, owing to defective chimneys, the owners of buildings be fined a reasonable amount, and that amount be turned into the Firemen's Relief Fund.

16. That the causing of fire through carelessness be made a misdemeanor and punished as such.

17. That every theatre be required to have a fire alarm box on the stage.

18. All buildings, other than single dwelling houses, should be equipped with gas shut-offs, either automatic, or manual that can be operated from the outside.

19. No buildings of any kind should be allowed nearer than 10 feet of each other, unless all openings in walls within 10 feet of another wall are protected with wired glass, metal frames and sashes.

20. That the use of any but safety matches be prohibited.

If the Metropolitan Fire Hazard Bill is not passed I recommend that a fire prevention bureau be established by the City of Boston, and the necessary legislation petitioned for which will give to the Fire Commissioner power to enforce all laws, ordinances and regulations relating to fire hazards, fire menaces, fire escapes, fire extinguishing apparatus, transportation, sale, use and storage of explosives and inflammable materials, hazardous business, or anything relating to fire prevention now held by any other city or state department. The Fire Commissioner to grant all licenses and permits relating to fire hazards and combustibles, and to have authority as follows:

(a.) To inspect all building plans.

(b.) To cause obstacles which may interfere with means of exit to be removed from floors, hallways, stairs, fire escapes, etc.

(c.) To require and regulate fire drills in theatres, public places of amusement, and public and private schools.

(d.) To require proper safeguards to be placed on roof skylights.

(e.) To order the installation of fire extinguishing appliances in railroad yards, lumber yards, factories, basements and cellars.

(f.) To regulate the accumulation and require the removal of all combustible rubbish, etc.

(g.) To regulate the use of salamander stoves.

(h.) To regulate the storage of combustible chemicals.

High Pressure.

The Public Works Department has completed plans for the building of the high pressure plant for the congested business district. It is to be located underground, in Charles street, between Beacon and Boylston streets. Advantage has been taken of the experience of New York, Philadelphia and Baltimore in the plans, and the Boston plant will be a great improvement over these three. When this is completed the city will have in the congested district an additional fire fighting equipment the equivalent of thirty steam fire engines.

RECOMMENDATIONS.

Motor Apparatus.

I would especially call your attention to the recommendations of the Chief of Department as to the installation of motor apparatus. Plans, as laid down by him, will call for \$300,000 to be spent during the next two years for this purpose. If carried out it would practically motorize all of Dorchester, Hyde Park, Brighton, West Roxbury, Jamaica Plain, and part of Charlestown, East Boston and South Boston, and the wagons of the repair shop and fire alarm branch. This would increase the efficiency of the department at least 25 per cent. It would also motorize apparatus in the downtown district that is seldom called out and make for a marked saving of expense.

I would also recommend that the \$15,000 already appropriated for a fire station for Parker Hill be transferred to motor apparatus to be used for the purchase of a motor ladder truck and a motor pumping engine to cover the Parker Hill section. This will give this section the needed protection.

New Stations.

Three new stations should be built this year; one in Charlestown, if built on land now used by the Fire Department, to cost, with equipment, \$40,000; one in Dorchester, in the vicinity of King square, to cost,

with equipment, \$50,000; and one in Readville, to cost, with equipment, \$25,000; the New York, New Haven & Hartford Railroad Company will furnish the land at a nominal rent. I would, therefore, recommend a special appropriation of \$115,000 to build three new stations as outlined above.

Salem Street Fire Station.

I renew my recommendations made to you last year that the coal station and fire station of Engine 8 on Salem street be disposed off and a new site purchased on Hanover street, in the vicinity of Blackstone and Richmond streets. This would call for about \$50,000 in addition to the money raised from the sale of the Salem street site.

FIRE ALARM UNDERGROUND CONSTRUCTION.

I would call your attention to the recommendations of the superintendent of fire alarm in regard to underground construction. There should be additional cable laid to establish an independent and interchangeable system, so that in case of an accident or breakdown another section of cable could be used without interrupting the service. For this purpose we should need this year \$31,000 in addition to our regular appropriation, and I, therefore, recommend a special appropriation to cover this amount. During the next four years we should spend at least \$50,000 a year on this important branch of the service.

ISOLATED FIRE ALARM OFFICE.

I would again call your attention to the hazardous location of the fire alarm office, and recommend that new quarters be erected of fireproof construction, and in an isolated location. In this connection, in the interests of efficiency and economy, I would recommend that careful consideration be given to the subject of placing the fire alarm office in the new building designed for the high pressure pumping plant. Combining these two stations into one would mean a saving to the city of \$75,000 over what they would cost if built separately. The original estimate of this department for this proposition was \$225,000, which I find no reason to change at this time.

WINDING, LIGHTING AND REPAIRING CLOCKS.

I would again recommend that the expense and labor of winding, lighting and repairing clocks of the city be transferred to some other department. It not only takes firemen away from their duty, but adds to the expense of fire fighting. This is unfair, and when the figures go out to the country it makes the cost higher in comparison with the other cities. It is not any part of a fireman's business to wind, light and repair clocks.

ONE-WAY STREETS.

I would again recommend that Mason street and Howard street be made one-way streets for the better efficiency of the fire companies stationed in or near those streets.

DUPLICATION IN NAMES OF STREETS.

I would recommend that the names of streets be changed so that there would be no two streets with the same name in the city. The increased number of notifications of fire to this department by means of the telephone, and the confusion that arises in locating the fire due to duplication in the names of streets calls for these changes.

In conclusion, I would state that the work of the members of this department has been efficiently performed during the year. I desire to express my appreciation for the hearty cooperation of the Board of Fire Underwriters and the other departments of the city with this department, and especially thank the Public Works Department, the Police Department, the Building Department and the Wire Department.

Yours very respectfully,

CHAS. H. COLE,

Fire Commissioner.

REPORT OF CHIEF OF THE DEPARTMENT.

FROM: THE CHIEF OF THE DEPARTMENT, BOSTON. 1 February, 1913.

TO: THE FIRE COMMISSIONER:

SUBJECT: ANNUAL REPORT.

The following is the report of the Fire Department for the year ending 31 January, 1913.

During the calendar year the department has responded to 5,244 alarms. The fire loss was \$2,531,017.

ADDITIONS AND CHANGES.

A gasoline combination chemical engine and hose wagon was put in service with Engine 37, replacing the horse-drawn hose wagon. This was for the better protection of the Parker Hill section.

A gasoline combination chemical engine and ladder truck was installed in the station at the corner of Calender and Lyons streets, Dorchester, and a new company known as Ladder Company 29 was organized to man this apparatus. This was for the better protection of the Talbot avenue section of Dorchester.

A gasoline chemical engine and ladder truck has been received, to be installed in the quarters of Engine Company 41, and a new company should be organized, to be known as Ladder Company 31, to man this apparatus. This company will replace Chemical Company 6, which should be disbanded.

A horse-drawn steam fire engine was installed in the station of Hose Company 48, Hyde Park, and a company to be known as Engine Company 48 was organized to man this apparatus, and Hose Company 48 was disbanded.

A water tower equipped with a quick-raising device was installed in the quarters of Tower Company 1 and the apparatus formerly used by that company placed in reserve in the East Boston district.

A gasoline chemical engine and ladder truck has been received, to be installed in the quarters of Engine Company 42, and a new company should be organized, to be known as Ladder Company 30, to man this apparatus. This company will replace Chemical Company 5, which should be temporarily disbanded.

It should later be reorganized to man the gasoline combination chemical which is expected soon to be installed in the quarters of Ladder Company 23. This is for the better protection of the Grove Hall section.

A gasoline combination chemical has been purchased and is expected to be installed in the quarters of Chemical Company 11 in a short time, replacing the horse-drawn apparatus in service with that company. This will afford additional protection in the Talbot avenue section of Dorchester.

A gasoline chemical engine and ladder truck has been purchased to replace the horse-drawn truck now in service with Ladder Company 21; this is for the better protection of the Orient Heights section of East Boston.

A new berth for Fireboat Engine 44 and station for crew, at Northern Avenue Bridge, was completed and occupied.

A new fire station in Oak square was completed and is now ready for the installation of the apparatus and men.

Plans and specifications were prepared and bids requested to remodel the quarters of Ladder Company 24. The house should be enlarged to accommodate extra men necessary to increase the strength to twelve men.

The services of twenty-seven call men have been dispensed with in District 15, Hyde Park.

The single jacket hose in service in Hyde Park at the time of annexation was condemned and replaced with double jacket hose.

A motor launch was placed in service for use in the marine district.

Eight turret nozzles were placed on hose wagons, making a total of twenty-eight now in service.

BUILDINGS.

As in my previous report, I must call your attention again to the fact that a great many of the stations in this department are not modern. At the time these stations were built the department was mainly on a call basis, and consequently a small amount of space was planned for the housing of the few permanent men assigned. The addition of men and horses to meet the increasing demands of the service has used up the reserve space to the limit.

With the incoming of motor apparatus these conditions will, no doubt, be somewhat improved, as space now given to supplies and equipment for horses may be utilized for other needs.

To keep this property in anything like good order requires the constant attention of the men in the different repair squads.

The interiors, as regards cleanliness, are in satisfactory condition.

The exterior wood and metal work of several houses have been painted since the last report and a plan evolved that will in time care for all stations in a similar manner.

Shower baths have been installed in several houses. A more sanitary drainage system is installed in the house of Ladder 24. A few houses have been remodeled, affording separate rooms for lieutenants.

APPARATUS AND EQUIPMENT.

The annual inspection and test of apparatus and equipment, including hose, found everything in good condition.

BUILDING INSPECTION.

Theatres, motion picture houses and all places of public assembly in this city were inspected by this department for either a new or renewal of license. The law compels a yearly renewal.

A weekly inspection and report was made of theatres and motion picture houses.

Inspections were made and reports submitted weekly of buildings which were visited, and hazardous conditions, when found, were brought to the attention of those officials under whose supervision they came.

A monthly inspection of all fire appliances in schools, libraries and other public buildings was made and conditions reported.

On request, signs erected on roofs of buildings were inspected and reported on.

This department made inspections and reports on all applications for licenses for the storage of gasoline.

Many inspections of reported hazardous conditions were made by request.

A member of this department was specially detailed to safeguard the transportation of explosives.

It can be readily seen by the foregoing that this

department, primarily organized to extinguish fires, has demands upon it for other purposes, without the necessary men, without authority to enforce penalties for violations of laws, or to remedy hazardous conditions when found.

It is the duty of officers of this department to visit all buildings in their company subdistrict, so as to become familiar with inside and exterior conditions.

This knowledge they must possess to use in fighting fire in same, to keep fire from getting in, or to save life. If, however, this department is expected to go further, then legislation is necessary to give authority, and an organization perfected to enforce such authority. A special force would be required for this work.

DRILLS.

During the year all companies have held weekly drills and all men coming into the department have passed through the regular drill school.

During the year twelve men have successfully passed the school of instruction for engineers.

MUTUAL AID.

The same willingness to cooperate exists in the fire departments of the cities and towns adjacent to Boston. During the past year we have sent apparatus to Cambridge, Watertown and Everett.

FIRE HAZARD AND PREVENTION.

With the exception that the incoming motor apparatus will add celerity and mobility, and a high pressure system will provide larger and more effective streams, the science and appliances for extinguishing fire have about reached their limit of effectiveness. Thus, fire prevention, by removing and curtailing the known hazards, is the proper direction in which to move.

A state commission is at present at work on obtaining facts to be used to procure remedial legislation to prevent this enormous pecuniary loss.

CIVIL SERVICE.

Promotions have been made from the list in order.

Motor apparatus replacing horse-drawn has changed certain requirements to properly man the apparatus of this department.

At present an automobile school is maintained to teach the operation and care of same. This method of obtaining chauffeurs weakens the fire fighting strength of the companies in that men are periodically detached from them to attend the school.

As it appears that motor-driven apparatus is to be added to this department in considerable numbers in the near future, the problem of obtaining the required number of men with sufficient knowledge to safely operate them will be more complex.

If feasible, a plan to have the appointees of this department equipped with this knowledge would release the City of Boston from the expense of maintaining such an expensive school and, what is more important, would keep more men in quarters.

HYDRANTS.

The following is the number and type of hydrants in use for fire service 31 January, 1913:

Ordinary post	2,961
Boston post	2,548
Lowry	1,937
Boston Lowry	754
Boston	217
Chapman post	181
Ludlow post	13
Coffin post	1
Total	<u>8,612</u>

RECOMMENDATIONS.

Many of the recommendations made in the last annual report have been carried out, and I reiterate my request for remaining items, with additional recommendations, the carrying out of which will, in my opinion, bring this department up to the standard of efficiency that our citizens expect.

FIRE STATIONS.

A site should be secured and a house built in the Readville section of Hyde Park to replace the present quarters of Hose Company 49, which are not adapted for the service.

A new station should be built on the site of Chemical Company 3, Winthrop street, Charlestown, for an engine company.

A new station on the same site for Engine Company 26-35. These quarters are inadequate for the number of men housed there. Any new plan should include offices for the Chief of Department.

Arrangements should be made, if possible, to obtain more room in the present building in which are the quarters of Engine Company 4, Chemical Company 1 and Water Tower Company 1. The present smoking and recreation room for the men of these companies is not fit for the purpose.

The present site of Engine 17 and Ladder 7 should be disposed of, and a new site secured and a station built for these companies, or a new house built on the same site.

A new station is needed to replace present quarters of Engine Company 8.

The City of Boston at the present time owns a lot of land in that part of West Roxbury known as German-town, which should be held as a site for a future fire station.

If another station is contemplated in the Dorchester section, it should be erected in the vicinity of King square.

Now that a municipal building is being erected in South Boston that will include the municipal court, the building vacated should be remodeled for Ladder Company 5.

Chemical Company 8 is very much in need of a heating plant. These quarters are at present heated by stoves.

The recommendations made in the last report for the substitution of shower rooms for bathtubs in the houses have been generally carried out, and I hope as far each year as the financial conditions will permit that this necessary adjunct for the comfort of the men will be installed in the houses.

I would recommend that, where possible, the work of providing separate rooms for all officers be continued.

APPARATUS.

Engines.

A gasoline combination pumping engine and hose wagon, to have a pump capacity of at least 700 gallons per minute, to be purchased for the Readville station to be erected.

A tractor-drawn steam fire engine, with a pump

capacity of at least 1,000 gallons per minute, for new station recommended on Winthrop street, Charlestown.

A gasoline combination pumping engine and hose wagon, to have a pump capacity of at least 700 gallons per minute, for service in the new station at Oak square, Brighton.

Also gasoline combination pumping engines and hose wagons, of a pump capacity of at least 700 gallons per minute, to replace the present horse-drawn steam fire engines in the quarters of Engine Companies 2, 11, 19, 30, 32, 34 and 42.

Tractors should be applied to the present horse-drawn steam fire engines in the quarters of Engine Companies 10, 20 and 41.

Chemical and Hose Combination Wagons.

Gasoline combination chemical and hose wagons to replace the present horse-drawn hose wagons in the quarters of Engine Companies 5, 16, 17, 20, 28, 29, 41, 45, 46 and 48.

A motor-driven high pressure hose wagon for the engine company recommended in Charlestown.

Chemical Engines.

The horse-drawn chemical engines at present located in the houses of Chemical Companies 1, 2, 4, 7, 8, 9, 10, 12 and 14, to be replaced by motor-driven chemical engines with two tanks each capable of holding at least 80 gallons.

Ladder Trucks.

Seventy-five or 85-foot aerial trucks, motor-driven, should be procured for service in the quarters of Ladder Companies 4 and 12 to replace the present horse-drawn box trucks.

Motor-driven combination ladder trucks, to replace the present horse-drawn trucks should be installed in the quarters of the following companies, viz.: Ladder Companies 6, 7, 10, 16, 19, 20, 23, 24, 25, 26 and 27.

Tractors should be applied to the present horse-drawn apparatus in the houses of Ladder Companies 14 and 15.

Water Towers.

The present horse-drawn Water Towers 1, 2 and 3, to have tractors installed. This in the interest of economy.

Miscellaneous.

The district chiefs should be furnished with motor-driven runabouts as soon as possible. The handicap of a horse-drawn wagon in the outlying districts is strongly felt by the officers in command of these sections.

Again I reiterate that it would be of great advantage to this department, and a measure of economy, to have a motor-driven wagon procured to replace the present horse-drawn wagon attached to the fire alarm branch, and a motor-driven wrecking wagon attached to the repair shop.

Men.

The following men would be needed to operate the recommended apparatus:

Readville Station.— This company should consist of a lieutenant and six men; as two men are at present on Hose Company 49, which would be disbanded and the men transferred to the new company, this would require the appointment of but five men. The services of the call men attached to this company could be dispensed with.

Oak Square Station.— A lieutenant and seven men would be required for this company.

Grove Hall Station.— A lieutenant and five men will be required to man the combination chemical purchased for these quarters.

The engine company recommended for the Winthrop street station in Charlestown to replace Chemical 3 would require but six men, as with Chemical 3 disbanded the men on that company could be transferred to the engine company.

Four men would be required to bring Ladder Company 24 up to the strength recommended.

The motor-driven ladder truck recommended for the quarters of Engine 41 will require four men. Chemical Company 6 should be disbanded and the men transferred to the truck.

The motor-driven ladder truck recommended for the quarters of Engine 42 will require three men. Chemical Company 5 should be disbanded temporarily and the men transferred to the truck.

In the event of a gasoline combination pumping engine replacing the horse-drawn engine now in service with Engine Company 11, I recommend that this apparatus be installed in Chemical House 7, East

Boston, and an engine company be organized to man the same. This would require twelve men.

An additional man should be assigned to each of the following companies to bring them up to the proper strength, viz.: Engine Companies 2, 5, 16, 19, 24, 29 and 30.

The morale of the fire fighting force is excellent, and, as always, the willingness to assist displayed by those who co-operated with us is worthy of commendation.

JOHN A. MULLEN.

FIRE ALARM BRANCH.

FROM: THE SUPERINTENDENT OF FIRE ALARM BRANCH,

BOSTON, 14 February, 1913.

TO: THE CHIEF OF DEPARTMENT:

SUBJECT: REPORT OF FIRE ALARM BRANCH FOR YEAR 1912-13.

I herewith submit report of the Fire Alarm Branch for the fiscal year, 1 February, 1912, to 1 February, 1913:

OPERATING DIVISION.*

Alarms received and transmitted:

Bell alarms, first	2,837
Bell alarms, second	62
Bell alarms, third	19
Bell alarms, fourth	7

Alarms received but not transmitted:

Alarms received from same box two or more times for the same fire	182
Alarms received from adjacent boxes for same fire	217
Alarms received for grass fires, treated as still alarms,	6

Box Records.

Boxes from which no alarm was received	325
Boxes from which twenty or more alarms were received,	26
Box tests and inspections (an average of about eleven for each box)	9,467

Still Alarms.

Alarms received from citizens by telephone	842
Alarms received from Police Department by telephone,	151
Alarms reported by companies to which they responded,	1,248
Box alarms received for same fires	160

Automatic Alarms.

Boston Automatic Fire Alarm Company, alarms received,	154
Department box alarms received for same	14
A. D. T. alarms received	24
Department box alarms received for same	6

Total Alarms.

Bell alarms	2,925
Still, automatic and A. D. T. alarms (eliminating those from which department box alarms were received)	2,419
Grand total of alarms	<u>5,344</u>

* Record of alarms from 1 January, 1912, to 31 December, 1912, inclusive.

CONSTRUCTION DIVISION.

Owing to a special appropriation a large amount of work has been accomplished this year. Seventy-six fire alarm boxes have been established, of which fifty-nine are department boxes located on streets, three private boxes and four boxes with auxiliary attachments located in buildings, and ten schoolhouse boxes, seven of which were placed to be of benefit to the general public. Twelve boxes were moved to better locations and forty-nine changes were made in the numbers of boxes in order to have the numbers grouped in a more systematic way. Because of the large increase in the number of boxes, four new circuits were made, two of them in Brighton, one in the city proper and one in East Boston. All boxes and posts were painted by contract.

Several improvements have been made in the fire alarm office. A new 110-circuit testing board was installed; a ten-pen ink register was replaced by three four-pen registers, and an old fault detector was removed; wooden mountings for instruments have been removed and slate substituted; registers that record the alarms from the Boston Automatic Fire Alarm Company and from the city of Cambridge were installed; new storage batteries for local circuits, a new charging board and new battery racks were set up and many changes were made in the office wiring. A new telephone terminal and protector boards were installed, and a new cable laid to the main terminal room.

A new filing cabinet was bought for the superintendent's office; a Western Union Company clock was bought for the office; maps of the underground system and of circuits have been made and brought up to date.

Many changes and additions to the lighting and signaling system in department houses have been made; an entirely new equipment was installed in the new quarters of Engine Company 44 at Northern Avenue Bridge; new punching registers have been put in service in the houses of Chemical Company 8 and Engine Company 44, and new registers have been bought for other houses.

Fifty-three new lamp-posts were set up and thirteen old ones replaced with new ones. Five new test posts were installed and four old ones replaced by new. Iron test posts are now being used instead of wooden posts. Thirty cable test boxes were established.

Six thousand nine hundred and seventy feet of 3-inch ducts were laid underground to be used mostly for post and pole connections.

In September last a contract was made with the American Electrical Works of Phillipsdale, R. I., to furnish 60,684 feet of cable of various sizes, and to install approximately 53,855 feet. This work has been seriously delayed and is yet unfinished.

The department force has installed about 7,682 feet of cable of different sizes in several sections of the city; 23,280 feet of aerial cable has been strung on poles, and approximately twenty-one and one-half miles of new wire have been used in the extension of the service and in replacing old wire. About forty miles of dead wire have been removed from poles.

Arrangements have been made to install a red light over every fire alarm box and to substitute electricity for gas in the lamp-posts now in service. Two boxes, 714 and 71, are already being lighted by electricity.

The following cable has been laid during the past year, but only a comparatively small amount has as yet been connected into service:

DORCHESTER.

	Feet.
Savin Hill avenue, Dorchester avenue to Rockdale street, 10-conductor cable	1,786
Park street, Dorchester avenue to Washington street, 6-conductor cable	3,563
Melville avenue, Dorchester avenue to Penhallow street, 10-conductor cable *	523
Centre avenue and Centre street, Dorchester avenue to Allston street, 6-conductor cable	1,740
Welles avenue, extension of cable to Washington street, 10-conductor cable	482
Mill street, at Preston street (under railroad tracks), 4-conductor cable†	395
Washington street, Park street to Roslin street, 10-conductor cable	3,742
Harvard street, Washington street to Blue Hill avenue, 15-conductor cable	4,602
Bernard street, Harvard street to Kerwin street, 6-conductor cable	1,235
Eldon street, pole connection, 4-conductor cable	388
Bowdoin and Westville streets, Washington street to Draper street, 6-conductor cable	3,251
Upham's Corner, to lamp-post, Box 199, 4-conductor cable *	240

* In service.

† Work done by this department.

FIRE DEPARTMENT.

25

	Feet.
Magnolia street, Dudley street to Oleander street, 6-conductor cable*	1,253
Pole connections at various places, 10-conductor cable†	415
Pole connections at various places, 4-conductor cable	120
Lamp-post connections, 10-conductor cable†	60

ROXBURY.

Dudley street, Winslow street to Adams street, 10-conductor cable*	1,342
Harrison avenue, Northampton street to Dudley street, 35-conductor cable*	3,141
Elm Hill avenue, Howland street to Cheney street, 6-conductor cable*	1,010
Lamp-post connections, 10-conductor cable†	183

JAMAICA PLAIN.

Chestnut avenue, Green street to Paul Gore street, 10-conductor cable†	1,635
Biltmore street, Chestnut avenue to Lamartine street, 10-conductor cable†	385
Centre street, Engine House 28 to Eliot street, 15-conductor cable	1,413
South street, Eliot street to St. Mark street, 15-conductor cable	2,953
Pole connections, 10-conductor cable†	174
Pole connections, 4-conductor cable†	86

BACK BAY.

Brookline avenue, 6-conductor cable	1,401
Jersey street, Brookline avenue to Boylston street, 6-conductor cable	1,039
Hemenway and Norway streets, lamp-post connections, 6-conductor cable	112

CITY PROPER.

Bristol street, Headquarters Building to Albany street, 35-conductor cable	478
Albany street, Bristol street to Northampton street, 35-conductor cable	5,020
Cumberland street, Huntington avenue to St. Botolph street, 10-conductor cable*	291
Charles street, Mt. Vernon street to Revere street, 6-conductor cable*	751
Minot street, Lowell street to Wall street, 10-conductor cable	250
Lamp-post connections, 10-conductor cable†	172
Northern avenue to quarters of Engine Company 44, 10-conductor (lead) cable	315

* In service.

† Work done by this department.

	Feet.
Northern avenue to quarters of Engine Company 44, 10-conductor (submarine) cable	425
Eastern avenue to North Ferry, 4-conductor cable	426

HYDE PARK.

Hyde Park avenue, River street to Green street, 10- conductor cable	895
West River street, Hyde Park avenue to Gordon avenue, 6-conductor cable	650

NEW FIRE ALARM POSTS.

Dorchester.

Park and Waldeck streets, 1-duct	21
Melville avenue and Penhallow street, 1-duct	25
Centre and Samoset streets, 1-duct	80
Dorchester avenue and Beale street, 1-duct	35
Dorchester avenue and Bellows place, 1-duct	8
Washington street, opposite Roslin street, 1-duct	8
Codman square, 1-duct	50
Harvard and School streets, 1-duct	28
Harvard and Glenway streets, 1-duct	28
Harvard and Wales streets, 1-duct	29
Harvard street and Blue Hill avenue, 1-duct	82
Bernard and Kerwin streets, 1-duct	15
Westville street and Dakota road, 1-duct	16
Westville street and Geneva avenue, 1-duct	16
Westville street and Draper street, 1-duct	17.5
Columbia road and Seaver street, 1-duct	94
Columbia road and Dudley street, 1-duct	36
Columbia road and Massachusetts avenue, 1-duct	38
Magnolia and Oleander streets, 1-duct	19

Roxbury.

Dudley and Langdon streets, 1-duct	12.5
Dudley street, opposite Adams street, 1-duct	15
Warren street and Kearsarge avenue, 1-duct	20
Warren and Maywood streets, 1-duct	17
Warren and Carlisle streets, 1-duct	12
Elm Hill avenue and Cheney street, 1-duct	16
Wayne and Maple streets, 1-duct	88
Washington street, opposite Valentine street, 1-duct	5
Harrison avenue and Lenox street, 1-duct	19
Blue Hill avenue and Woodcliff street, 1-duct	13

Jamaica Plain.

Chestnut avenue and Chestnut place, 1-duct	15.5
Lamartine and Biltmore streets, 1-duct	8
Centre and Burroughs streets, 1-duct	20

	Feet.
Centre and Eliot streets, 1-duct	14
South street, opposite Jamaica street, 1-duct	42
Washington street, opposite Forest Hills street, 1-duct,	5

West Roxbury.

Centre and Park streets (by Schoolhouse Department), 1-duct	16
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Brighton.

Brighton and Harvard avenues, 1-duct	44
Cambridge and Saunders streets, 1-duct	25
Washington and Oakland streets, 1-duct	27.6
Washington and Fairbanks streets, 1-duct	20.6
Washington and Matchett streets, 1-duct	23
Washington street at Oak square, 1-duct	15.8

Back Bay.

Boylston and Jersey streets, 1-duct	33
Hemenway and Norway streets, 1-duct	41

City Proper.

Cumberland and St. Botolph streets, 1-duct	118.3
Washington street and Cottage place, 1-duct	14
Harrison avenue and Kneeland street, 1-duct	28.5
Franklin and Broad streets, 1-duct	40
North square, 1-duct	20
Minot street, opposite Wall street, 1-duct	23.6
Charles and Revere streets, 1-duct	22.9

Charlestown.

Rutherford avenue and Devens street, 1-duct	50.9
Bartlett and Sullivan streets, 1-duct	14

NEW TEST POSTS.

Park street and Dorchester avenue, 4-duct	23
Harrison avenue and Northampton street, 4-duct	28
Harrison avenue and Dudley street, 4-duct	26
Washington and Market streets, Brighton, 4-duct	50
Atlantic and Northern avenues, 3-duct	45

OLD TEST POSTS REPLACED BY NEW.

Tremont and Linden Park streets.	
Tremont street, opposite Northfield street (two old ducts replaced by new).	
Forest Hills square.	
Maverick square.	

NEW POLE CONNECTIONS.

Dorchester.

	Feet.
Savin Hill avenue and Sydney street, 1-duct . . .	63
Savin Hill avenue, opposite Rockdale street, 1-duct .	66
Park street and Geneva avenue, 1-duct . . .	146
Park and Greenbrier streets, 1-duct . . .	111
Dorchester avenue and Ashmont street, 1-duct . .	135
Harvard and Waterlow streets, 1-duct . . .	33
Harvard and Greenwood streets, 1-duct . . .	187.5
Harvard street and Blue Hill avenue, 1-duct . . .	52
Washington and Eldon streets, 1-duct . . .	210
Centre and Allston streets (by New England Telephone and Telegraph Company), 1-duct . . .	262.5
Mill and Preston streets (2), 1-duct . . .	274

Roxbury.

Washington and Guild streets, 1-duct . . .	35
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Jamaica Plain.

Chestnut avenue and Paul Gore street, 1-duct . .	18
Chestnut avenue and Boylston street, 1-duct . .	50
Lamartine and Biltmore streets, 1-duct . . .	43
Centre street and Harris avenue, 1-duct . . .	92
South and Boynton streets, 1-duct . . .	52.5

Hyde Park.

Business street, 1-duct . . .	260
Dana and Hyde Park avenues, 1-duct . . .	33
Gordon avenue, 1-duct . . .	20.5

Brighton.

Washington and Foster streets, 1-duct . . .	105
Washington and Lake streets, 1-duct . . .	77.5
Washington and Bigelow streets, 1-duct . . .	87.6
Washington and Tremont streets, 1-duct . . .	54
Washington and Parsons streets, 1-duct . . .	38.3

Charlestown.

Rutherford avenue and Chapman street, 1-duct .	23
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ENGINE HOUSE DUCT CONNECTIONS.

Northern avenue, Atlantic avenue to drawbridge, 1-duct . . .	288
Harvard street to Engine House 18, 2-duct . . .	65
Oak square to new department house, 3-duct . . .	159
Eastern avenue to North Ferry Headhouse, 1-duct .	56
Bristol street, Albany street to headquarters, 4-duct .	295

MANHOLE BUILT.

Washington street, opposite Forest Hills street.

LAMP-POSTS REPLACED BY NEW.

Brattle street (Box 18), top knocked off by team.

Massachusetts avenue and Beacon street (Box 801), knocked down by automobile.

Cambridge and North Russell streets (Box 24), knocked down by team.

Washington and Milk streets (Box 41), knocked down by automobile.

Washington street, opposite Boylston street (Box 53), knocked down by team.

Albany and Way streets (Box 65), knocked down by team.

Shawmut avenue and Waltham street (Box 73), knocked down by team.

Washington and Green streets (Box 519), knocked down by hose wagon.

Washington and Park streets (Box 364), gas leak.

LAMP-POSTS RELOCATED.

Boylston and Fairfield streets (Box 90), on account new subway.

Tremont and Winter streets (Box 42), on account new subway.

Tremont and Berkeley streets (Box 71), on account large trolley cars.

Park square (Box 62), on account change in square, one new duct, 12 feet.

AERIAL CABLE INSTALLED.

	Feet.
Chelsea street, East Boston, Maverick square to Day street, 10-conductor cable	4,309
Paul Gore street, Jamaica Plain, 10-conductor cable,	550
Codman street, Dorchester avenue to Washington street, 4-conductor cable	1,250
River street, Mattapan, 6-conductor cable	1,000
Various sizes in short lengths in different sections	16,171

PUBLIC BOXES INSTALLED.

City Proper.

Box. Location.

- 30, Charles and Revere streets.
- 701, Minot street, opposite Wall street.
- 710, Franklin and Broad streets.
- 714, North square and Garden-court street.
- 751, Harrison avenue and Kneeland street.
- 771, Washington street and Cottage place.
- 804, Hemenway and Norway streets.

East Boston.

Box. Location.

624, Frankfort and Gove streets.

656, Bennington street and Neptune road.

Charlestown.

437, Medford street, opposite Walnut street.

South Boston.

164, Summer street, opposite D street.

Dorchester.

181, Pleasant and Mayfield streets.

183, Sydney street, opposite No. 71.

306, Magnolia and Oleander streets.

310, East Cottage and Humphreys streets.

345, Park and Spencer streets.

350, Canterbury and Austin streets.

372, Columbia road and Seaver street.

381, Norfolk and Chipman streets.

384, Evans and Capen streets.

396, Almont and Colorado streets.

912, Pleasant street, opposite Downer avenue.

916, Fox and Percival streets.

934, Melville avenue and Penhallow street.

952, Dorchester avenue, opposite Bellows place.

954, Dorchester avenue and Beale street.

960, Adams and Hillsdale streets.

976, Cedar and Sanford streets.

983, Tenean street.

988, Minot and Sheridan streets.

Roxbury.

223, Harrison avenue and Lenox street.

233, Dudley street, opposite Adams street.

236, Warren street and Kearsarge avenue.

244, Lambert street, opposite Lambert avenue.

257, Centre and Cedar streets.

263, Washington street, opposite Valentine street.

274, Elm Hill avenue and Cheney street.

275, Warren and Carlisle streets.

282, Wait and Hillside streets.

303, Blue Hill avenue and Woodcliff street.

Jamaica Plain and West Roxbury.

Box.	Location.
502,	Cranston and Sheridan streets.
505,	Chestnut avenue and Boylston street.
508,	Lamartine and Biltmore streets.
510,	Washington street, opposite Forest Hills street.
548,	Washington street and Highview terrace.
576,	Metropolitan and Augustus avenues.
585,	Florence and Catherine streets.
590,	Maple and Garden streets.
599,	Mt. Vernon street, near Montview street.

Brighton.

810,	Farrington avenue and Linden street.
813,	Harvard and Brighton avenues.
836,	Cambridge and Saunders streets.
840,	Market street and Western avenue.
866,	Chestnut Hill avenue and South street.
867,	Commonwealth avenue and Wallingford road.
869,	Sutherland road and Beacon street.
874,	Mt. Vernon and Foster streets.
878,	Litchfield and Cygnet streets.
881,	Market and Mapleton streets.

NEW PRIVATE BOXES.

120,	New York, New Haven & Hartford Railroad Yard, south of Dover street.
732,	Gordon's Olympia Theatre, Washington street.
785,	St. James Theatre, Huntington avenue.

NEW AUXILIARY PRIVATE BOXES.

298,	Trimont Manufacturing Company, Amory street.
530,	Emerson Hospital, Morton street.
748,	John Hancock Building, Devonshire street.
796,	American House, Hanover street.

NEW SCHOOLHOUSE BOXES.

2141,	Brimmer School, Common street.
2211,	Cumberland and St. Botolph streets, Charles C. Perkins School.
2238,	Massachusetts avenue and Washington street, Girls' Trade School.
2239,	George T. Angell School, Harrison avenue and Hunneman street.

Box.	Location.
2241,	Lewis School, Walnut avenue and Paulding street.
2336,	Beaumont street, opposite No. 59, Ellen H. Richards School.
2524,	Florence and Hawthorne streets, Florence School.
2528,	Robert G. Shaw School, Hastings street.
2616,	U. S. Grant School, Paris street.
2628,	John Cheverus School, Pope and Moore streets.

CHANGES IN LOCATION OF BOXES.

- 141, Mt. Washington avenue and Granite street to Seventh and O streets.
 146, Seventh and N streets to Sixth and N streets.
 250, Highland street and Fort avenue to Highland and Beech Glen streets.
 276, Warren and Quincy streets to Warren and Maywood streets.
 506, Boylston street, opposite Adelaide street, to Boylston street and Belmore terrace.
 839, Western avenue, Engine House 34, to Western avenue and Telford street.
 915, Eaton square and Percival street to Bowdoin and Quincy streets.
 2227, Hugh O'Brien School to lamp-post at Dudley and Langdon streets.
 2516, Ellis Mendell School to pole at School and Copley streets.

BOXES REMOVED FROM SERVICE.

Auxiliary Company Boxes.

- 166, Perkins Institute for the Blind, Broadway.
 467, Boston & Maine Railroad hay sheds, Rutherford avenue.
 726, East side of Long Wharf.
 2236, Perkins Institute for the Blind, Perkins and Day streets.

Schoolhouse Boxes.

- 2128, Cook School, Groton street.
 2327, Elbridge Smith School, Dorchester avenue and Centre street.
 2616, Old High School, Meridian and Paris streets.
 2814, Brighton High School, Cambridge street.

Department Boxes.

- 698, Chelsea Police Station, Chelsea square (temporarily).

SUMMARY OF WORK DONE.

	Feet.
New line wire used	113,010
Old wire taken down	211,410
Aerial cable installed	23,180
Conductors in aerial cable	101,624
Aerial cable removed	2,319
Conductors in aerial cable removed	14,536
Underground cable installed in New England Telephone and Telegraph Company's ducts	43,463
Conductors in same	522,311
Underground cable installed in fire alarm ducts	6,559
Conductors in same	75,902
Total underground cable installed (new work)	50,022
Conductors in same	598,213
Cable used for repairs	1,329
Conductors in same	14,816
Conduits built by this department	4,838
Ducts in same	6,970
Manholes built	1
Cross-arms used	595
Fire alarm boxes installed (total)	76
Fire alarm boxes installed by Fire Department	59
Fire alarm boxes installed by Schoolhouse Department	10
Fire alarm boxes installed by Auxiliary Company	4
Fire alarm boxes installed by private ownership	3
Fire alarm boxes removed from service	8
Fire alarm posts installed (new)	53
Fire alarm posts reset	13
Fire alarm test posts installed (new locations)	5
Fire alarm test posts replaced by new	4
Fire alarm pole test boxes installed	30

FIRE ALARM BOXES IN SERVICE.

Total number	888
Owned by Fire Department.	639
Owned by Schoolhouse Department	130
Owned by Auxiliary Fire Alarm Company	57
Owned privately	62
Department boxes are established and equipped:	
On lamp-posts	226
On poles :	382
On buildings with lights over them	24
On buildings without lights over them	5
In buildings	2
With keyless doors	582
With key doors	57
With auxiliary attachments	15

Schoolhouse boxes are established and equipped:

Inside buildings	61
Outside buildings accessible to public	29
Outside buildings inaccessible at times	22
On poles	15
On lamp-posts	3
On building with light	1
With keyless doors	69
With key doors	61

Auxiliary Company boxes are established and equipped:

Inside buildings	34
Outside buildings	23
On building with light	1
With keyless doors	8
With key doors	49

Private boxes are established and equipped:

Inside buildings	36
Outside buildings	26
With keyless doors	9
With key doors	53

POSTS.

Lamp-posts in service	229
Lamp-posts not yet in service and set	22
Test posts	42
Pole test boxes	105

CIRCUITS.

Number of box circuits (main office)	48
Number of box circuits, Hyde Park	4
Number of tapper circuits (main office)	10
Number of tapper circuits, Hyde Park	1
Number of gong circuits	13
Bell circuit, Hyde Park	1
Special repeater circuit, Hyde Park to main office	1
High pressure signaling circuit	1
Number of telephone circuits to department stations,	36
Number of telephone circuits to Tremont Exchange	7
Number of telephone circuits to Oxford Exchange	1
Special circuit to police headquarters (telephone)	1
Special circuit to American District Telephone Com- pany's office	1

WIRE, CABLE AND CONDUITS.

	Feet.
Line wire in service	1,759,450
Aerial cable in service	95,509
Conductors in aerial cable	628,661
Underground cable in service	453,612
Conductors in underground cable	9,041,510

	Feet.
Conduit owned by the department	39,792
Ducts in conduit	50,543
Ducts in New England Telephone and Telegraph Company's system used by this department . . .	338,845

APPARATUS.

Number of tappers in service	121
Number of gongs in service	122
Number of telephones in department system . . .	127
Number of public exchange telephones	8
Number of registers in service	5
Number of relays in service	5

TOWER BELLS.

Bells in service:	Pounds.
Faneuil Hall (steel)	5,816
Methodist Episcopal Church, Central avenue, Hyde Park.	
Old Hose House, Hyde Park avenue, Hyde Park.	
Whistle in service:	
Hyde Park Electric Light Station.	

BELLS OWNED BY FIRE DEPARTMENT, BUT NOT IN SERVICE.

	Pounds.
Old City Hall Building, Charlestown, composition . .	3,600
Engine 1, Dorchester street, South Boston, com- position	2,911
Engine 16, Temple street, Dorchester, composition . .	4,149
Engine 19, Norfolk street, Dorchester, composition . .	2,927
Engine 20, Walnut street, Dorchester, composition . .	3,061
Engine 21, Columbia road, Dorchester, composition . .	3,026
Engine 29, Chestnut Hill avenue, Brighton, steel . .	1,535
Engine 30, Old House, Mt. Vernon street, West Rox- bury, steel	1,000
Engine 34, Western avenue, Brighton, composition . .	1,501
Engine 41, Harvard avenue, Brighton, composition . .	800
Engine 45, Washington and Poplar streets, West Roxbury, composition	1,059
Ladder 4, Dudley street, Roxbury, composition . . .	3,509
Saratoga Street Church, East Boston, steel	1,968
Trinity Church, Trenton street, East Boston, compo- sition	1,760

CLOCKS.

The care of the department clocks has been transferred to the department repair shop.

Sixty-two reports of tower clocks have been attended to.

Extensive repairs were made on the following clocks: Old State House, Unitarian Church, Jamaica Plain, Neponset church and the Gaston School.

The tower of Lyceum Hall was repaired, the expense being charged to this department. Because of the refusal of the lessee of the building to furnish keys to the department, the clock in Lyceum Hall has been out of service since 25 November, 1912.

FOLLOWING IS A LIST OF PUBLIC CLOCKS CARED FOR
BY THIS DEPARTMENT.

City Proper.

Charles Street Church.

Christ Church, Salem street, owned by city.

Commercial Wharf.

Odd Fellows Hall, Tremont street, owned by city.

Old South Church, Washington street, owned by city.

Old State House, Washington street, owned by city.

Suffolk County Jail, Charles street, owned by city.

St. Stephen's Church, Hanover street, owned by city.

Public Library Branch, Shawmut avenue (Old Shawmut Avenue Church).

Tremont M. E. Church, Tremont and Worcester streets, owned by city.

Young Men's Christian Union, Boylston street, owned by city.

South Boston.

Gaston Schoolhouse, owned by city.

Lincoln Schoolhouse, owned by city.

Phillips Church, Broadway, owned by city.

St. Augustine's Church, Dorchester street, owned by city.

East Boston.

London Street Church, owned by city.

Lyceum Hall, owned by city.

Trinity Church, Trenton street, owned by city.

Orient Heights Church, Breed and Ashley streets, owned by city.

Roxbury.

Winthrop Street Church, owned by city.

Boston Elevated Railway car house, Columbus avenue, owned by city.

Dorchester.

Baker Memorial Church, Columbia road, owned by city.

Neponset Church, Walnut street.

Tileston School, Norfolk street, owned by city.

Charlestown.

St. Francis de Sales Church, Bunker Hill street.

Old City Hall, City square, owned by city.

West Roxbury.

South Evangelical Church (Doctor Strong), Mt. Vernon street, owned by city.

Unitarian Church, Centre and Eliot streets, owned by city.

Congregational Church, Ashland street, owned by city.

Brighton.

Bennett Schoolhouse, Chestnut Hill avenue, owned by city.

RECOMMENDATIONS.

Many improvements should be made in this branch to bring the system up to a proper standard. To do everything that is necessary would mean a very large expenditure, but a special appropriation should be made each year in order to accomplish the result. The most important thing to consider is to improve present conditions rather than to extend the system. The following are the more important features of the system that demand immediate attention.

Automobiles.

The necessity of keeping the fire alarm system always in serviceable condition demands means by which faults may be located and corrected quickly. At present a large amount of valuable time is lost when trouble occurs in reaching the seat of the trouble. At times many boxes or tappers are out of service when a circuit is open, and in case of fire serious results might happen because of lack of facilities for the public to notify the department. In general work, also, much more could be accomplished if so much time were not lost in going from place to place. Two runabouts and a small auto-truck should be bought to remedy this condition.

Outside Construction.

Many of the cables in Boston proper are old and may need to be replaced at any time. In order to avoid serious trouble, because of defective cable, new cables should be laid in various sections to relieve the old cables of parts of their loads, and frequent test points should be established to make an easily interchangeable system. This work is most important.

The amount of underground cables would be approximately 258 miles of wire. The amount of wire removed from poles due to the underground work would be approximately 62 miles. When installed this cable wire should allow for the future and enough extra conductors are figured on to provide for additional circuits. In some of the locations there are no wires at present, but cables must be laid in order to divide present circuits.

There are about 330 miles of wire strung on poles in the system. A large part of this wire is bare and in many places on poles with high voltage wires. Much of this wire should be renewed and where possible wires should be put underground. Thousands of feet of ducts are being held in reserve for the use of the city's cables.

Interchangeable System of Underground Cables.

I would recommend that enough cable be purchased to establish an interchangeable system. This would cost, approximately, \$31,000, and would give the desired protection to the congested districts of the city.

Boxes.

There are on file requests for over one hundred signal boxes and in most cases these requests should be granted. There are many places where the distance between boxes is far too great.

Circuits.

Some of the box circuits are overloaded and new circuits should be made to relieve these conditions. In some sections of the city additional tapper circuits should be installed so that the striking apparatus in too many of the department houses in one section will not be on the same circuit.

Office Apparatus.

New registers to record alarms from boxes should be bought and a new manual transmitter, to be used as a

spare machine, should be installed. A new generator should be set up in the repair shop to be used for fire alarm purposes and at least one more motor generator should be purchased.

Telephone System.

The telephone system is old and out of date. A new common battery system should be installed, but if the present system is to be continued public exchange lines should be installed in each division and district headquarters.

Wiring in Department Houses.

The wiring in the lighting and fire alarm systems in several of the department houses is not in accord with present day requirements and must be changed. Test switches should be installed in all houses so as to facilitate the location of circuit troubles, and in some houses additional tappers would improve the service.

Hyde Park.

When the service of call men in Hyde Park is discontinued, the tower bells and whistle should be removed from the service and the signal boxes timed to correspond with the Boston system. Circuits should be run to the Bristol street office, but the present automatic equipment, located in the house of Engine 48, should be kept to be used in case of emergency. The boxes in this district are old and of an inferior make and should be replaced with new and up-to-date types.

GEORGE L. FICKETT.

REPAIR DIVISION, FIRE DEPARTMENT.

FROM: THE SUPERINTENDENT OF REPAIR SHOP.

BOSTON, 13 February, 1913.

TO: THE FIRE COMMISSIONER:

SUBJECT: ANNUAL REPORT.

The following is a report of the work done by the Construction and Repair Force during the year 1 February, 1912, to 1 February, 1913.

REPAIRS ON APPARATUS.

Total number	2,357
By outside firms	257

Among these repairs four engines have been overhauled and three repainted; seven ladder trucks were rebuilt in whole or in part and five were painted; two hose wagons were overhauled and two painted; three chemical engines were overhauled nine chief's wagons were overhauled and painted and twelve other wagons were overhauled and painted; eight hose wagons were equipped with 1,100-gallon Invincible nozzles; 137 repairs were made on automobiles; eighty-six new rubber tires were applied and seventeen rubber tires reset.

HOSE.

	Feet.
Total purchased during year	15,548
Total condemned during year	17,320
Amount in use 1 February, 1913	133,339½
Amount in store 1 February, 1913	3,520½

All repairs to department hose have been made at the department shop.

HARNESS.

No new harness has been purchased during the year. All harness requiring it has been repaired or renewed by the harnessmakers.

HOUSE REPAIRS.

Carpenter, plumber, painter and steam fitting repairs,	
total number	640

Nine stations have been renovated, ten have had shower baths or new plumbing installed, twenty-three have been painted in whole or in part.

Besides numerous small jobs, such as slight repairs and putting in new valves, the heating plants of twenty-one fire stations have been replaced with better apparatus or have been extensively repaired.

Lumber, paint, etc., to the amount of \$2,541 was furnished various companies, the work being done by the members.

FURNITURE REPAIRS.

[illegible]

SUPPLIES.

Supplies for the fire-fighting branch have been purchased through the repair shop branch in connection with the Supply Department of the city.

Total amount of supplies purchased	\$21,427 90
An inventory of all supplies and material was taken 1 February, 1913, and shows that the value of the supplies and material on hand amounted to . . .	\$73,399 00

EUGENE M. BYINGTON.

HEADQUARTERS FIRE DEPARTMENT, BOSTON.

FROM: THE MEDICAL EXAMINER.

BOSTON, 3 February, 1913.

TO: THE CHIEF OF DEPARTMENT:

SUBJECT: ANNUAL REPORT.

I have the honor to report for the year ending 1 February, 1913, as follows:

Number of cases of illness	321
Number of cases of injury	167

EXAMINATIONS.

For appointment as probationary firemen	89
General examinations, including probationers, at the expiration of their terms	942
House and hospital visits	116

The health of the men has been good and the number of injuries much smaller than in previous years. The thirty-four medicine chests, carried on the different apparatus, have been well maintained and kept in good order, showing the interest manifested by commanding officers.

DEATHS.

Ladderman Leroy James, 24 May, 1912, pneumonia.

Ladderman Charles A. Glennon, 25 June, 1912, endocarditis.

Ladderman Philip T. Smith, 21 August, 1912, fractured skull.

Engineer William H. Clay, 3 December, 1912, diabetes.

District Chief Robert A. Ritchie, 22 December, 1912, valvular heart disease.

Lieutenant M. D. Greene, 13 January, 1913, degeneration of the spinal cord.

In closing allow me to thank you and your subordinate officers for the efficient cooperation rendered to me in the discharge of my duties.

RUFUS W. SPRAGUE, M. D.

BOSTON FIRE DEPARTMENT VETERINARY HOSPITAL.

FROM: THE VETERINARIAN.

BOSTON, 3 February, 1913.

TO: THE CHIEF OF DEPARTMENT:

SUBJECT: ANNUAL REPORT.

I respectfully report the number of horses purchased, sold, died and destroyed for year ending 31 January, 1913, as follows:

Total number of horses on hand 1 February, 1912	415
Total number of horses on hand 1 February, 1913	415
Horses purchased	50
Horses sold	34
Horses died	7
Horses destroyed	9
Horseshoeing	\$18,410 99
Horse hire	\$618 00

The general condition of the horses is good. There is but one class of apparatus that we have much trouble with, and that is the ladder companies in the outlying districts. The runs are long and the country hilly, and my opinion is that the horses would be better able to stand the long runs and hills if they were given more consideration by the drivers.

DANIEL P. KEOGH, M. D. V.

THE DEPARTMENT ORGANIZATION.

Commissioner, CHARLES H. COLE.
 Chief Clerk, BENJAMIN F. UNDERHILL.
 Chief of Department, JOHN A. MULLEN.
 Superintendent of Construction and Repairs, EUGENE M. BYINGTON.
 Superintendent of Fire Alarms, GEORGE L. FICKETT.
 Assistant Superintendent of Fire Alarms and Chief Operator, RICHARD DONAHUE.
 Veterinarian, DANIEL P. KEOGH.
 Medical Examiner, RUFUS W. SPRAGUE.

STRENGTH AND PAY.

HEADQUARTERS.

	Per annum.
1 Commissioner	\$5,000
1 Chief clerk	2,500
1 Medical examiner	1,300
1 Bookkeeper	1,650
2 Clerks	1,400
1 Clerk	1,200
1 Clerk	1,000
1 Assistant engineer (messenger)*	1,300
1 Private (explosives detail)*	1,300

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FIRE FIGHTING BRANCH.

1 Chief of department	\$4,000
1 Deputy chief	3,000
1 Deputy chief	2,800
13 District chiefs	2,300
58 Captains	1,800
93 Lieutenants	1,600
1 Lieutenant, aide to chief	1,600
3 Engineers	1,500
47 Engineers	1,400
43 Assistant engineers	1,300
3 Assistant engineers	1,100
695 Privates:	
445	1,300
33	1,200
63	1,100
54	1,000
56	900
44	720

* Detailed from fire fighting branch.

FIRE DEPARTMENT.

45

	Per day.
1 Chief's driver	\$2 50
1 Chief's driver	2 00

961

Call Men.

	Per annum.
3 Temporary call men in District 15 (Hyde Park),	\$100

REPAIR SHOP BRANCH.

1 Superintendent	\$2,500
1 Captain, assistant superintendent *	1,800
1 Lieutenant, foreman of hose and harness shop *	1,600
1 Engineer *	1,400
1 Assistant engineer *	1,300
1 Master carpenter *	1,400
1 Master painter *	1,400
1 Engineer (master plumber) *	1,400
6 Privates *	1,300

Employees.

1 Clerk	1,100
1 Clerk	900
	Per day.
1 Engineer	\$3 25
3 Firemen	3 25
2 Plumbers	4 40
1 Steamfitter	4 00
1 Painter	3 75
6 Painters	3 50
2 Wheelwrights	3 25
6 Machinists	3 25
1 Foreman of blacksmiths	4 00
3 Blacksmiths	3 75
4 Blacksmith's helpers	2 75
1 Blacksmith's helper	2 50
3 Carpenters	3 50
1 Vulcanizer	3 00
2 Hose and harness repairers	3 25
1 Hose and harness repairer	2 25
4 Laborers	2 25

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FIRE ALARM BRANCH.

	Per annum.
1 Superintendent	\$2,500
1 Assistant superintendent	2,300
5 Privates, assistant operators *	1,300
	Per day.
1 Chief's driver *	\$2 00

* Detailed from fire fighting branch.

Employees.

	Per annum.
1 Clerk	\$850
4 Operators	1,600
3 Assistant operators	1,400
1 Assistant operator	1,300
1 Foreman of construction	2,000
	Per day.
1 Machinist	\$4 00
1 Machinist	3 50
21 Telegraphers and linemen (average)	3 60
1 Hostler	2 50

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VETERINARY HOSPITAL BRANCH.

	Per annum.
1 Veterinarian	\$2,300
1 Captain, assistant to veterinarian*	1,800

Employees.

	Per day.
3 Hostlers (average)	\$2 25
1 Horseshoer	3 00

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6—
1,080

CHIEF OF DEPARTMENT.

JOHN A. MULLEN.

Headquarters, Engine House 26-35, Mason Street.

The Chief is in charge of the fire protection for the whole city, which is subdivided into two divisions, each in charge of a deputy chief.

DIVISION 1.

Deputy Chief, JOHN GRADY.

Headquarters, Ladder House 8, Fort Hill Square.

This division comprises Districts 1, 2, 3, 4, 5, 6 and 13 (Marine District).

*District 1.**District Chief*, JOHN W. GODBOLD.Headquarters, Ladder House 2, Paris Street,
East Boston.

All that portion of the city (excluding any part of the Marine District) which is included within the district known as East Boston.

* Detailed from fire fighting branch.

Apparatus Located in the District.—Engines 5, 9, 11, 40, Ladders 2, 21, Chemical 7.

District 2.

District Chief, CHARLES H. W. POPE.

Headquarters, Ladder House 9, Main Street,
Charlestown.

All that portion of the city (excluding any part of the Marine District) which is included within the district known as Charlestown.

Apparatus Located in the District.—Engines 27, 32, 36, Ladders 9, 22, Chemicals 3, 9.

District 3.

District Chief, JOHN O. TABER.

Headquarters, Ladder House 18, Pittsburgh Street.

All that portion of the city (excluding any part of the Marine District) which is included within a line beginning at the intersection of State and Devonshire streets, thence easterly through State street to the waterfront, thence southeasterly across the harbor to the extension of C street, South Boston, thence southerly through C street to Cypher street, thence northwesterly through Cypher street to B street, thence southwesterly through B street to West First street, thence westerly through West First street to Atlantic Avenue Bridge, thence through Atlantic Avenue Bridge and Atlantic avenue to Summer street, thence westerly through Summer street to Devonshire street, thence through Devonshire street to the point of beginning.

Apparatus Located in the District.—Engines 25, 38, 39, Ladders 8, 14, 18, Water Tower 3.

District 4.

District Chief, HENRY A. FOX.

Headquarters, Engine House 4, Bulfinch Street.

All that portion of the city (excluding any part of the Marine District) which is included within a line beginning at the intersection of State and Devonshire streets, thence southerly through Devonshire street to Water street, thence westerly through Water street to Washington street, thence southerly through Washington street to School street, thence through School street and Beacon street to Charles street, thence northerly through

Charles street to Pinckney street, thence westerly through Pinckney street to the Cambridge boundary line, thence northerly along said Cambridge boundary line to its intersection with the tracks of the Eastern Division of the Boston & Maine Railroad, thence northeasterly to the Warren Avenue Drawbridge, thence easterly to the Charlestown Drawbridge, thence northeasterly and then southerly around the waterfront to the extension of State street, thence through State street to the point of beginning.

Apparatus Located in the District.—Engines 4, 6, 8, Ladders 1, 24, Chemical 1, Water Tower 1.

District 5.

District Chief, DANIEL F. SENNOTT.

Headquarters, Engine House 26-35, Mason Street.

All that portion of the city (excluding any part of the Marine District) which is included within a line beginning at the intersection of Devonshire and Water streets, thence running westerly through Water street to Washington street, thence southerly through Washington street to School street, thence through School street and Beacon street to Charles street, thence northerly through Charles street to Pinckney street, thence westerly through Pinckney street to the Cambridge boundary line, thence southerly along said boundary line to the extension of Otter street, thence through Otter street to Beacon street, thence easterly through Beacon street to Arlington street, thence through Arlington street to Boylston street, thence easterly through Boylston street to Church street, thence through Church street to Providence street, thence through Providence street to Columbus avenue, thence through Columbus avenue to Church street, thence through Church street to Tremont street, thence northerly through Tremont street to Pleasant street, thence southeasterly through Pleasant street and Broadway extension to Fort Point channel, thence northerly through Fort Point channel to Atlantic Avenue Bridge, thence through Atlantic Avenue Bridge and Atlantic avenue to Summer street, thence westerly through Summer street to Devonshire street, thence through Devonshire street to the point of beginning.

Apparatus Located in the District.—Engines 7, 10, 26, 35, Ladder 17, Chemical 2.

District 6.

District Chief, EDWIN A. PERKINS.

Headquarters, Engine House 1, Dorchester Street,
South Boston.

All that portion of the city (excluding any part of the Marine District) which is included within a line beginning at the intersection of Atlantic Avenue Bridge and Fort Point channel, thence southerly through Atlantic Avenue Bridge to West First street, thence through West First street to B street, thence northerly through B street to Cypher street, thence through Cypher street to C street, thence northerly through C street to the waterfront, thence by the waterfront southeasterly, then westerly to the extension of Columbia road, thence through Columbia road to Mt. Vernon street, thence through Mt. Vernon street to Willow court, thence through Willow court to Massachusetts avenue, thence through Massachusetts avenue to the New York, New Haven & Hartford Railroad tracks (inclusive), thence northerly along said tracks (inclusive) to the South bay, thence northerly to Fort Point channel, thence through Fort Point channel to the point of beginning.

Apparatus Located in the District.—Engines 1, 2, 15, 43, Ladders 5, 19, 20, Chemical 8.

District 13. (Marine District.)

Acting District Chief, CAPT. WALTER S. EATON.

Headquarters, Fireboat Engine 44, Northern Avenue
Bridge.

All that navigable portion of Boston Harbor and the rivers or waters emptying therein which is included within the city limits, with all the floats, vessels, ships, scows and boats of every description afloat thereon; all wharves, docks and piers (exclusive of the buildings on said wharves, docks and piers) extending into said navigable waters.

The following islands, with the buildings erected thereon, situated in Boston Harbor:

Governor's, Apple, Deer, Lovell's, Gallop's, George's, Long, Rainsford, Spectacle, Thompson's and Castle.

Apparatus Located in the District.—Engines 31, 44, 47 (fireboats).

DIVISION 2.

Deputy Chief, PETER F. McDONOUGH.

Headquarters, Ladder House 4, Dudley Street.

This division comprises Districts 7, 8, 9, 10, 11, 12, 14 and 15.

District 7.

District Chief, JOHN T. BYRON.

Headquarters, Engine House 22, Warren Avenue.

All that portion of the city (excluding any part of the Marine District) which is included within a line beginning at the intersection of Beacon and Otter streets, thence easterly through Beacon street to Arlington street, thence through Arlington street to Boylston street, thence easterly through Boylston street to Church street, thence through Church street to Providence street, thence through Providence street to Columbus avenue, thence through Columbus avenue to Church street, thence through Church street to Tremont street, thence northerly through Tremont street to Pleasant street, thence easterly through Pleasant street and Broadway extension to Fort Point channel, thence southerly through Fort Point channel to the Roxbury canal, thence southerly through the Roxbury canal to Massachusetts avenue, thence northwesterly through Massachusetts avenue to the Cambridge boundary line, thence northeasterly along said boundary line to a point opposite the extension of Otter street, thence through Otter street to the point of beginning.

Apparatus Located in the District.—Engines 3, 22, 33, Ladders 3, 13, 15, Chemical 4, Water Tower 2.

District 8.

District Chief, STEPHEN J. RYDER.

Headquarters, Ladder House 12, Tremont Street.

All that portion of the city (excluding any part of the Marine District) within a line beginning at the intersection of Massachusetts avenue and the Cambridge boundary line, thence through Massachusetts avenue to Washington street, thence southerly through Washington street to Atherton street, thence westerly

through Atherton and Mozart streets to Chestnut avenue, thence southerly through Chestnut avenue to Sheridan street, thence through Sheridan street to Centre street, thence through Centre street to Perkins street, thence through Perkins street to South Huntington avenue, thence northerly through South Huntington avenue to Castleton street, thence through Castleton street across Jamaica way to the Brookline line, thence northerly and westerly along the Brookline boundary line to the Cottage Farm Bridge (inclusive), thence northerly through Essex street to the Cambridge boundary line, thence easterly by said Cambridge boundary line to the point of beginning.

Apparatus Located in the District.—Engines 13, 14, 37, Ladders 12, 26, Chemical 12.

District 9.

District Chief, MICHAEL J. KENNEDY.

Headquarters, Engine House 12, Dudley Street.

All that portion of the city (excluding any part of the Marine District) within a line beginning at the intersection of the extension of Columbia road and the Old Harbor, thence running westerly through Columbia road to Mt. Vernon street, thence through Mt. Vernon street to Willow court, thence through Willow court to Massachusetts avenue, thence through Massachusetts avenue to the New York, New Haven & Hartford Railroad tracks (exclusive), thence northerly along said tracks (exclusive) to the South bay, thence westerly along said South bay to the Roxbury canal, thence southerly through the Roxbury canal to Massachusetts avenue, thence northwesterly through Massachusetts avenue to Washington street, thence southerly through Washington street to Columbus avenue, thence easterly through Columbus avenue to Seaver street, thence through Seaver street to Blue Hill avenue, thence northerly through Blue Hill avenue to Geneva avenue, thence through Geneva avenue to Columbia road, thence northeasterly through Columbia road to Stoughton street, thence easterly through Stoughton street to Pleasant street, thence through Pleasant street to Savin Hill avenue, thence easterly and northerly through Savin Hill avenue to Evandale terrace, thence through Evandale terrace to the waterfront, thence northerly along the waterfront to the point of beginning.

Apparatus Located in the District.—Engines 12, 21, 23, 24, Ladder 4, Chemical 10.

District 10.

District Chief, JOHN W. MURPHY.

Headquarters, Engine House 18, Harvard Street,
Dorchester.

All that portion of the city (excluding any part of the Marine District) within a line beginning at the intersection of the extension of Evandale terrace and Dorchester bay, thence through Evandale terrace to Savin Hill avenue, thence northerly and westerly through Savin Hill avenue to Pleasant street, thence northerly through Pleasant and Stoughton streets to Columbia road, thence southerly through Columbia road to Geneva avenue, thence westerly through Geneva avenue to Blue Hill avenue, thence southerly through Blue Hill avenue to Canterbury street, thence through Canterbury street to Morton street, thence southerly through Morton street to Blue Hill avenue, thence northerly through Blue Hill avenue to Lauriat avenue, thence through Lauriat avenue to Norfolk street, thence through Norfolk street to Centre street, thence through Centre street to Adams street, thence northerly through Adams street to Mill street, thence through Mill street to Preston street, thence through Preston street to Freeport street, thence southerly through Freeport street to Dorchester bay, thence northerly along the waterfront to the point of beginning.

Apparatus Located in the District.—Engines 17, 18, Ladders 7, 23, 29, Chemicals 5, 11.

District 11.

District Chief, JOHN E. MADISON.

Headquarters, Engine House 41, Harvard Avenue,
Brighton.

All that portion of the city (excluding any part of the Marine District) included within the district known as Brighton which is west of the Cottage Farm Bridge and Essex street.

Apparatus Located in the District.—Engines 29, 34, 41, Ladders 11, 31, Chemical 6.

District 12.

District Chief, MICHAEL J. MULLIGAN.

Headquarters, Engine House 28, Centre Street,
Jamaica Plain.

All that portion of the city known as West Roxbury and Jamaica Plain within a line beginning at the intersection of the extension of Castleton street and the Brookline boundary line, thence through Castleton street to South Huntington avenue, thence southerly through South Huntington avenue to Perkins street, thence easterly through Perkins street to Centre street, thence easterly through Centre street to Sheridan street, thence through Sheridan street to Chestnut avenue, thence northeasterly through Chestnut avenue to Mozart street, thence through Mozart street to Atherton street, thence through Atherton street to Columbus avenue, thence easterly through Columbus avenue to Seaver street, thence through Seaver street to Blue Hill avenue, thence southerly through Blue Hill avenue to Canterbury street, thence through Canterbury street to Morton street, thence southerly through Morton street to Harvard street, thence southerly through Harvard street to Ashland street, thence westerly through Ashland street to the New York, New Haven & Hartford Railroad tracks (exclusive), thence southerly along the New York, New Haven & Hartford Railroad tracks to the Hyde Park boundary line, thence southwesterly along the Hyde Park boundary line to the Dedham boundary line, thence northwesterly along the Dedham boundary line to the Newton boundary line, thence northeasterly by the Newton boundary line to the Brookline boundary line, thence southeasterly and then northerly along said Brookline boundary line to the point of beginning.

Apparatus Located in the District.—Engines 28, 30, 42, 45, Ladders 10, 16, 25, 30, Chemical 13.

District 14.

District Chief, MAURICE HEFFERNAN.

Headquarters, Engine House 46, Peabody Square,
Dorchester.

All that portion of the city (excluding any part of the Marine District) within a line beginning at the inter-

section of Dorchester bay and Freeport street (Commercial Point), thence northerly through Freeport street to Preston street, thence through Preston street to Mill street, thence through Mill street to Adams street, thence southerly through Adams street to Centre street, thence through Centre street to Norfolk street, thence through Norfolk street to Lauriat avenue, thence through Lauriat avenue to Blue Hill avenue, thence southerly through Blue Hill avenue to Morton street, thence northwesterly through Morton street to Harvard street, thence southerly through Harvard street to Oakland street, thence through Oakland street to Rexford street, thence through Rexford street to Blue Hill avenue, thence northerly through Blue Hill avenue to Fremont street, thence through Fremont street to the Neponset river, thence along the Neponset river and Dorchester bay northwesterly to the point of beginning.

Apparatus Located in the District.—Engines 16, 20, 46, Ladders 6, 27.

District 15.

Acting District Chief, CAPT. JOHN H. WETHERBEE.

Headquarters, Engine House 48, Corner Harvard Avenue and Winthrop Street, Hyde Park.

All that portion of the city within a line beginning at the intersection of the extension of Fremont street and the Milton boundary line, thence through Fremont street to Blue Hill avenue, thence southerly through Blue Hill avenue to Rexford street, thence through Rexford street to Oakland street, thence westerly through Oakland street to Ashland street, thence through Ashland street to the New York, New Haven & Hartford Railroad tracks (inclusive), thence southerly along the New York, New Haven & Hartford Railroad tracks (inclusive) to the boundary line of Hyde Park, thence along the Hyde Park boundary line to the Dedham boundary line, thence southeasterly along the Dedham boundary line to the Milton boundary line, thence along the Milton boundary line to the point of beginning.

Apparatus Located in the District.—Engines 19, 48, Ladder 28, Chemical 14, Hose 49.

NOTE.—Wherever a street, channel or bridge is named the center line of each will be the line used.

FIRE STATIONS.

LOCATION AND VALUATION.

LOCATION.	Number of Feet in Lot.	Assessed Valuation.	Occupied by
Dorchester and Fourth streets.....	8,169	\$25,800	Engine 1 and Ladder 5.
Corner of O and Fourth streets.....	4,000	16,200	Engine 2.
Bristol street and Harrison avenue...	4,000	30,000	Engine 3 and Ladder 3.
Bulfinch street.....	6,098	96,000	Engine 4, Chemical 1 and Tower 1.
Marion street, East Boston.....	1,647	9,000	Engine 5.
Leverett street.....	2,269	40,000	Engine 6.
East street.....	1,893	37,300	Engine 7.
Salem street.....	2,568	26,500	Engine 8.
Paris street, East Boston.....	4,720	33,300	Engine 9 and Ladder 2.
River street.....	1,886	20,500	Engine 10.
Saratoga and Byron sts., East Boston,	10,000	40,000	Engine 11 and Ladder 21.
Dudley street.....	7,320	25,000	Engine 12.
Cabot street.....	4,832	16,000	Engine 13.
Centre street.....	5,713	14,600	Engine 14.
Dorchester avenue.....	2,803	18,600	Engine 15.
Corner River and Temple streets....	12,736	19,200	Engine 16 and Ladder 6.
Meeting House Hill, Dorchester.....	9,450	17,300	Engine 17 and Ladder 7.
Harvard street, Dorchester.....	9,440	18,800	Engine 18.
Norfolk street, Dorchester.....	7,683	14,200	Engine 19.
Walnut street, Dorchester.....	9,000	17,300	Engine 20 and Ladder 27.
Columbia road, Dorchester.....	10,341	17,100	Engine 21.
Warren avenue.....	7,500	62,500	Engine 22 and Ladder 13.
Northampton street.....	3,445	11,200	Engine 23.
Corner Warren and Quincy streets...	4,186	18,100	Engine 24.
Fort Hill square.....	4,175	100,600	Engine 25, Ladder 8 and Ladder 14.
Mason street.....	5,623	191,000	Engines 26 and 35.
Elm street, Charlestown.....	2,600	18,000	Engine 27.
Centre street, Jamaica Plain.....	10,377	28,300	Engine 28 and Ladder 10.
Chestnut Hill avenue, Brighton.....	14,358	37,200	Engine 29 and Ladder 11.
Centre street, West Roxbury.....	12,251	25,000	Engine 30 and Ladder 25.

Fire Stations.—*Concluded.*

LOCATION.	Number of Feet in Lot.	Assessed Valuation.	Occupied by
521 Commercial street, on land of Public Works Department.	.....	*\$15,700	Engine 31, fireboat.
Bunker Hill street, Charlestown.....	8,188	26,200	Engine 32.
Corner Boylston and Hereford streets,	5,646	105,000	Engine 33 and Ladder 15.
Western avenue, Brighton.....	4,637	17,800	Engine 34.
Monument street, Charlestown.....	5,668	21,000	Engine 36 and Ladder 22.
Corner Longwood and Brookline aves.,	5,231	14,300	Engine 37 and Ladder 26.
Congress street.....	4,000	39,000	Engines 38 and 39.
Sumner street, East Boston.....	4,010	18,000	Engine 40.
Harvard avenue, near Cambridge street, Brighton.	6,112	25,500	Engine 41 and Chemical 6.
Washington street, at Egleston square,	3,848	22,900	Engine 42 and Ladder 30. ¹
Andrew square.....	5,133	19,600	Engine 43 and Ladder 20.
Northern Avenue Bridge.....	.....	†	Engine 44, fireboat.
Washington street, corner Poplar street, Roslindale.	14,729	22,400	Engine 45 and Ladder 16.
Dorchester avenue, Ashmont.....	4,875	22,900	Engine 46.
Adjoining South Ferry, East Boston..	11,950	31,600	Engine 47, fireboat.
Harvard avenue and Winthrop street, Hyde Park.	9,450	40,100	Engine 48, Ladder 28 and Chemical 14.
Church street.....	3,412	23,600	Chemical Engine 2.
Winthrop and Soley streets.....	5,230	15,400	Chemical 3.
Shawmut avenue.....	889	4,300	Chemical Engine 4.
Saratoga street, East Boston.....	9,300	40,600	Chemical Engine 7.
B street.....	1,800	7,800	Chemical Engine 8.
Eustis street.....	1,790	8,000	Chemical Engine 10.
Corner Callender and Lyons streets...	7,200	13,200	Chemical 11 and Ladder 29.
Corner Walk Hill and Wenham streets,	11,253	17,800	Chemical 13.
Friend street.....	1,676	37,200	Ladder 1.
Dudley street.....	3,923	26,000	Ladder 4.
Main street, Charlestown.....	4,290	16,400	Ladder 9 and Chemical 9.
Tremont street.....	4,311	25,600	Ladder 12 and Chemical 12.
Harrison avenue.....	2,134	23,500	Ladder 17.
Pittsburgh street, South Boston.....	8,964	35,400	Ladder 18 and Tower 3.
Fourth street.....	3,101	10,700	Ladder 19.
Washington street, Dorchester.....	6,875	21,400	Ladder 23 and Chemical 5. ²
North Grove street.....	3,918	19,800	Ladder 24.
Oak square, Brighton.....	9,889	42,000	Ladder 31. ³
Sprague and Milton streets, Hyde Park District, on land owned by the New York, New Haven & Hartford Railroad.	.....	‡	Hose 49.

* On building and wharf.

† Wharf and building cost \$32,000.

‡ Building of little value and belongs to city.

¹ March 5, 1913.² May 14, 1913.³ February 24, 1913.

Headquarters Building, corner of Albany and Bristol streets, 15,679 feet of land	\$113,000
Water Tower No. 2 and wrecking wagon are in Headquarters Building.	

OTHER BUILDINGS.

Repair Shop, 363 Albany street, 8,000 feet of land	\$68,000
Veterinary Hospital, Atkinson street, 64,442 feet of land	75,000
Coal station, Dorchester street, 1,610 feet of land,	3,100
Coal station, Salem street, 417 feet of land	4,400
Coal station, Main street, Charlestown, 2,430 feet of land	6,500
Total value of land, wharves and buildings	*2,177,300

LEASED BUILDINGS.

Building No. 50 Bristol street used by the Fire Alarm Branch as work shop, storeroom and stable.

Part of building 240-256 Dover street used as storehouse for spare apparatus.

About 800 square feet of shed on Sleeper street (New Haven Terminal Stores) used as a coal station.

Part of building 11 Atherton street used for storage.

During the year the coal station on Washington street, near Dover street, 1,007 feet of land, valued at \$10,500, was transferred to the Health Department.

*Including \$32,000, cost of wharf and building at Northern Avenue Bridge.

CANNEL COAL STATIONS.

DIVISION 1.

DISTRICT.	Location.	Capacity. (Tons.)	Wagons.
1.....	Engine 11.....	12	1
1.....	Engine 40.....	20	2
2.....	Engine 36.....	35	1
2.....	Ladder 9.....	35	1
2.....	Chemical 3.....	15	1
3.....	Sleeper street.....	45	3
3.....	Engines 38 and 39.....	6	1
3.....	Ladder 18.....	1	
4.....	Engine 8.....	5	1
4.....	Ladder 24.....	16	2
5.....	Engine 26.....	20	1
5.....	Chemical 2.....	35	3
6.....	Engine 2.....	20	1
6.....	Dorchester street, 330.....	20	2

DIVISION 2.

7.....	Engine 33.....	25	1
8.....	Engine 13.....	40	1
8.....	Engine 14.....	10	1
8.....	Engine 37.....	20	1
9.....	Engine 12.....	5	1
9.....	Engine 21.....	6	1
9.....	Engine 23.....	5	1
9.....	Engine 24.....	7	1
10.....	Engine 17.....	3	1
10.....	Engine 18.....	5	1
11.....	Engine 29.....	7	1
11.....	Engine 34.....	7	1
11.....	Engine 41.....	10	1
11.....	Ladder 31.....	10	

Cannel Coal Stations.—*Concluded.*

DISTRICT.	Location.	Capacity. (Tons.)	Wagons.
12.....	Engine 28.....	20	1
12.....	Engine 30.....	9	1
12.....	Engine 42.....	9	1
12.....	Engine 45.....	9	1
14.....	Engine 16.....	5	1
14.....	Engine 20.....	7	1
14.....	Engine 46.....	4	
15.....	Engine 19.....	8	1
15.....	Engine 48.....	10	1
15.....	Hose 49.....	1	

APPARATUS.

Steam Engines.—45 in service, 6 in reserve.

Ladder Trucks.—31 in service, 9 in reserve.

Chemical Engines.—14 in service, 6 in reserve.

Water Towers.—3 in service, 1 in reserve.

Fireboats.—3 in service.

Hose Wagons.—45 in service, 5 in reserve.

Chief's Wagons.—16 in service, 1 in reserve.

Motor Cars.—8 in service.

Motor Combination Wagons.—2 in service.

Miscellaneous.—41 fuel wagons, 6 repair wagons, 2 supply wagons, 3 manure wagons, 1 caravan, 39 hose pungs, 3 jobbing pungs, 4 fire alarm pungs, 3 hydrant pungs.

ENGINES.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
1.....	Clapp & Jones Manufacturing Company.	April, 1890	American Fire Engine Company...	1899	8½	5	7	Second.	9,175
2.....	Silsby Manufacturing Company.....	1890	American Fire Engine Company...	1904	8	4¾	8	Second.	9,100
3.....	American Fire Engine Company.....	Jan., 1904	.....	.....	9	5½	8	First.	10,000
4.....	International Power Company.....	Jan., 1907	.....	.....	8½	5	8	First.	10,220
5.....	American Fire Engine Company.....	June, 1907	.....	.....	8	4¾	8	Second.	9,435
6.....	Anoskeag Manufacturing Company..	1870	Manchester Locomotive Works....	1890	7¾	4¾	8	Second.	8,500
7.....	American Fire Engine Company....	Feb., 1893	American-La France Fire Engine Company.	1907	9	5½	8	First.	9,900
8.....	American-La France Fire Engine Company.	May, 1907	.....	.....	9	5½	8	First.	10,450
9.....	Silsby Manufacturing Company.....	April, 1890	American Fire Engine Company...	1902	8	4¾	8	Second.	9,150
10.....	Silsby Manufacturing Company.....	April, 1886	American Fire Engine Company...	1903	8	4¾	8	Second.	8,900
11.....	Anoskeag Manufacturing Company..	March, 1879	Manchester Locomotive Works....	1905	6¾	4¼	8	Third.	8,300
12.....	International Power Company.....	Dec., 1911	.....	.....	7¾	4¾	8	Second.	9,250
13.....	Clapp & Jones Manufacturing Company.	April, 1890	American Fire Engine Company...	1899	8½	5	7	Second.	9,150
14.....	Anoskeag Manufacturing Company..	1872	International Power Company.....	1907	7¾	4¾	8	Second.	8,700
15.....	American Locomotive Works.....	Dec., 1904	.....	.....	8½	5	8	First.	10,450

16.....	Amoskeag Manufacturing Company..	July,	1872	American British Company.....	1910	7 $\frac{7}{8}$	4 $\frac{1}{2}$	8	Second.	8,740
17.....	Manchester Locomotive Works.....	May,	1886	Manchester Locomotive Works....	1906	6 $\frac{3}{8}$	4 $\frac{1}{4}$	8	Third.	8,490
18.....	Manchester Locomotive Works.....	Nov.,	1890	Manchester Locomotive Works....	1905	6 $\frac{1}{8}$	4	8	Fourth.	8,175
19.....	Manchester Locomotive Works.....	Feb.,	1896	.....	1909	6 $\frac{1}{8}$	4 $\frac{1}{4}$	8	Third.	7,950
20.....	Silsby Manufacturing Company.....	Aug.,	1882	American Fire Engine Company...	1900	8	4 $\frac{3}{8}$	8	Second.	9,465
21.....	Amoskeag Manufacturing Company..	Sept.,	1870	International Power Company.....	1907	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	8,555
22.....	Manchester Locomotive Works.....	Nov.,	1896	.....	.....	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	9,440
23.....	Silsby Manufacturing Company.....	April,	1890	American Fire Engine Company...	1901	8	4 $\frac{3}{8}$	8	Second.	9,215
24.....	Amoskeag Manufacturing Company..	July,	1867	American Locomotive Works.....	1904	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	8,415
25.....	American-La France Fire Engine Company.	Dec.,	1910	.....	.....	9	5 $\frac{1}{2}$	8	First.	10,500
26.....	International Power Company.....	Feb.,	1909	.....	.....	8 $\frac{1}{2}$	5 $\frac{1}{8}$	8	First.	10,475
27.....	Silsby Manufacturing Company.....	.....	1891	American Fire Engine Company....	1892	8	4 $\frac{3}{8}$	8	Second.	9,118
28.....	Amoskeag Manufacturing Company..	Oct.,	1867	American Locomotive Company...	1904	7 $\frac{3}{8}$	4 $\frac{5}{8}$	8	Second.	8,895
29.....	American British Company.....	Jan.,	1911	.....	.....	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	9,250
30.....	Manchester Locomotive Works.....	Nov.,	1890	International Power Company.....	1910	6 $\frac{1}{8}$	4	8	Fourth.	8,375
31.....	Clapp & Jones Manufacturing Company.	.....	1889	.....	.....	16	9	10	1 pump, 2,800 gals.	
32.....	International Power Company.....	June,	1907	.....	.....	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	9,100
33.....	International Power Company.....	Nov.,	1909	.....	.....	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	9,125
34.....	Amoskeag Manufacturing Company,	Dec.,	1869	American Locomotive Company...	1904	7 $\frac{7}{8}$	4 $\frac{5}{8}$	8	Second.	8,300
35.....	Manchester Locomotive Works (self-propeller).	Jan.,	1898	.....	.....	9 $\frac{1}{4}$	5 $\frac{3}{8}$	8	Double extra first.	18,200

ENGINES.—*Concluded.*

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
36.....	International Power Company.....	Nov., 1909	.....	.....	8½	5½	8	First.	10,450
37.....	Manchester Locomotive Works.....	March, 1896	International Power Company....	1907	6½	4½	8	Third.	8,375
38.....	Manchester Locomotive Works (self-propeller).	June, 1897	.....	.....	9½	5½	8	Double extra first.	18,170
39.....	Manchester Locomotive Works.....	June, 1901	.....	.....	8½	5	8	First.	10,355
40.....	American Locomotive Company.....	Jan., 1906	.....	.....	8½	5	8	First.	10,350
41.....	International Power Company.....	Feb., 1909	.....	.....	7½	4½	8	Second.	9,210
42.....	Manchester Locomotive Works.....	March, 1884	International Power Company.....	1907	6½	4½	8	Third.	8,175
43.....	Amoskeag Manufacturing Company...	Nov., 1867	American Locomotive Company....	1904	7½	4½	8	Second.	8,620
44.....	American Fire Engine Company.....	Aug., 1895	.....	.....	{ 12½ H. P. 18 L.	{ P. 10	11	{ 2 sets of pumps, 6,000 gallons.	
45.....	Manchester Locomotive Works.....	Feb., 1895	Fire Department Repair Shop.....	1900	6½	4	8	Fourth.	8,200
46.....	Manchester Locomotive Works.....	Nov., 1890	Manchester Locomotive Works.....	1902	6½	4	8	Fourth.	8,200
47.....	G. F. Blake Manufacturing Company,	Aug., 1909	.....	.....	{ 12 H. 22 L.	{ 10	11	{ 2 sets of pumps, 6,000 gallons.	
48.....	Hunneman & Co.....	Oct., 1872	Manchester Locomotive Works....	1905	7½	4½	8	Third.	9,435

In Reserve.

C.....	Amoskeag Manufacturing Company,	Nov., 1872	Manchester Locomotive Works....	1898	6½	4½	8	Third.	7,510
D.....	American Fire Engine Company.....	June, 1895	American-La France Fire Engine Company.	1907	9	5½	8	First.	9,900
26.....	Manchester Locomotive Works.....	July, 1903	.....	.....	8½	5	8	First.	10,000
33.....	Manchester Locomotive Works.....	April, 1901	.....	.....	7¾	4¾	8	Third.	9,125
28.....	Manchester Locomotive Works.....	Oct., 1882	Fire Department Repair Shop....	1904	7¾	4½	8	Third.	7,970
12.....	Manchester Locomotive Works.....	March, 1882	Manchester Locomotive Works....	1904	6¾	4½	8	Third.	9,260

CHEMICAL ENGINES.

NUMBER.	Built by	Put in Service.	Remarks.	Capacity.	Weight.
1.....	American-La France Fire Engine Company.....	Dec., 1910	.....	Gallons. 100	Pounds. 5,400
2.....	Babcock Manufacturing Company.....	April 25, 1874	.....	160	5,780
3.....	Fire Extinguisher Manufacturing Company.....	April 29, 1898	.....	70	5,500
4.....	Babcock Manufacturing Company.....	May, 1876	Rebuilt by Hinman, 1886, rebuilt at Boston Fire Department Repair Shop, April, 1906.	160	5,735
5.....	American-La France Fire Engine Company.....	May 14, 1913	Combination, motor driven.....	35	7,750
6.....	Babcock Manufacturing Company.....	May 1, 1876	Altered by Hinman.....	100	4,270
7.....	Babcock Manufacturing Company.....	Sept. 27, 1886	Altered by Hinman.....	100	4,880

CHEMICAL ENGINES.—*Concluded.*

NUMBER.	Built by	Put in Service.	Remarks.	Capacity.	Weight.
				<i>Gallons.</i>	<i>Pounds.</i>
8.....	Babcock Manufacturing Company.....	Oct. 27, 1887	Altered by Hinman.....	160	5,735
9.....	Babcock Manufacturing Company.....	July 17, 1889	Altered by Hinman.....	100	4,640
10.....	Babcock Manufacturing Company.....	Sept. 13, 1889	Altered by Hinman.....	100	4,700
11.....	Charles T. Holloway.....	March, 1892	.....	70	5,590
12.....	Babcock Manufacturing Company.....	Oct., 1890	.....	100	4,580
13.....	Knox Auto Company.....	July, 1910	.....	35	8,140
14.....	Babcock Manufacturing Company.....	1881	.....	100	3,900
Hose Wagon 49.....	.....	.....	Acquired from Hyde Park.	.....	.....

In Reserve.

NUMBER.	Built by	Put in Service.	Capacity.	Weight.
			<i>Gallons.</i>	<i>Pounds.</i>
A.....	Charles T. Holloway.....	Nov., 1895	100	4,500
B.....	Charles T. Holloway.....	Oct., 1895	100	4,550
C.....	Charles T. Holloway.....	Sept., 1896	80	3,500
E.....	Charles T. Holloway.....	1894	70	5,500
Reserve 1.....	Babcock Manufacturing Company.....	1890	100	4,580
Reserve 5.....	Babcock Manufacturing Company (altered by Hinman).....	Sept. 21, 1876	100	4,750

LADDER TRUCKS.

NUMBER.	Built by	Put in Service.	Rebuilt by	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
1.	Hunneman & Co.	Dec., 1889	Charles Waugh & Co.	513	12	10,900
2.	Abbott-Downing Company.	1899	.....	439	12	10,800
3.	Abbott-Downing Company.	June 2, 1886	.....	472	14	9,450
4.	Abbott-Downing Company.	April 25, 1884	.....	440	15	8,800
5.	Hunneman & Co.	March, 1870	Charles Waugh & Co.	426	17	10,625
6.	C. N. Perkins & Co.	Aug., 1905	.....	232	17	8,350
7.	C. T. Holloway & Co.	July 28, 1898	.....	267	10	8,175
8.	Hunneman & Co.	1870	Fire Department Repair Shop.	468	14	10,200
9.	Fire Department Repair Shop.	1908	.....	367	15	10,040
10.	Fire Department Repair Shop.	March 18, 1909	.....	307	12	8,280
11.	American-La France Fire Engine Company.	Jan., 1907	.....	397	14	10,050
12.	J. Ryan & Co.	July, 1880	Fire Department Repair Shop.	423	15	8,670
13.	Fire Department Repair Shop.	1907	.....	317	Extension.	12,100
14.	American-La France Fire Engine Company.	Jan., 1911	.....	316	Extension.	12,970
15.	American-La France Fire Engine Company.	Nov., 1906	.....	335	Extension.	12,700
16.	Fire Department Repair Shop.	Sept., 1888	.....	298	15	8,080
17.	Seagrave Company.	June, 1911	.....	281	Extension.	13,100
18.	Seagrave Company.	April, 1910	.....	362	Extension.	13,005

LADDER TRUCKS.—*Concluded.*

NUMBER.	Built by	Put in Service.	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
19.....	Fire Extinguisher Manufacturing Company.....	Jan., 1898.....	172.....	8.....	6,937.....
20.....	Charles N. Perkins & Co.....	Dec. 30, 1902.....	242.....	8.....	8,500.....
21.....	Charles T. Holloway.....	Jan., 1898.....	201.....	9.....	7,330.....
22.....	Charles T. Holloway.....	Jan., 1898.....	207.....	9.....	8,225.....
23.....	American-La France Fire Engine Company.....	Dec., 1910.....	197.....	9.....	7,300.....
24.....	Charles T. Holloway & Co.....	Oct., 1901.....	221.....	7.....	7,100.....
25.....	Charles T. Holloway & Co.....	April 25, 1900.....	166.....	7.....	7,000.....
26.....	American-La France Fire Engine Company.....	Nov., 1908.....	262.....	7.....	6,435.....
27.....	Charles N. Perkins & Co.....	Nov., 1901.....	224.....	9.....	8,000.....
28.....	Seagrave Company.....	Nov., 1910.....	366.....	12.....	5,700.....
29.....	American-La France Fire Engine Company.....	Jan. 23, 1913.....	263.....	10.....	8,900.....
30.....	American-La France Fire Engine Company.....	March 5, 1913.....	263.....	10.....	8,900.....
31.....	American-La France Fire Engine Company.....	Feb. 24, 1913.....	263.....	10.....	8,900.....

In Reserve.

DESCRIPTION.	Built by	Weight. (Pounds.)
Relief A.....	Fire Department Repair Shop.....	8,400.....
Relief E.....	Fire Department Repair Shop.....	8,000.....
Reserve Ladder 11.....	Hunneman & Co.....	8,000.....
Relief D.....	Hunneman & Co.....	8,500.....

Former Ladder 18.....	International Fire Engine Company.....	Oct., 1902	Extension.	12,000
Former Ladder 9.....	Waugh & Co.....	.....1872	.....	10,020
Former Ladder 17.....	American-La France Fire Engine Company.....	April, 1891	Extension.	13,000
Old No. 1 (Hyde Park).....	Johnson.....	.....	.....	6,000
New truck.....	American-La France Fire Engine Company.....	.....1910	.....	6,500

WATER TOWERS.

NUMBER.	Built by	Put in Service.	Weight. (Pounds.)
1.....	American-La France Fire Engine Company.....	Oct. 30, 1912	14,600
2.....	Kansas City Fire Department Supply Company.....	May 17, 1890	10,000
3.....	International Fire Engine Company.....	Nov. 2, 1903	12,050
Tower 4.....	Kansas City Fire Department Supply Company.....	Dec. 18, 1893	10,000

TOOLS AND MACHINERY IN REPAIR SHOP.

BLACKSMITH SHOP.	Boiler Room.	Hose and Harness Shop.	Engine Room.	Wheelwright and Machine Shop.
5 forges.	3 Manning vertical tubular boilers, each 75 horse power.	1 Buckley electric hose testing and expanding engine.	1 25 horse power steam engine, cylinder, 9 by 31.	1 each engine lathes, with foot beds, 28 by 12; 16 by 12; 16 by 9; 14 by 8 and 14 by 6.
1 power hammer.	2 Blake boiler feed pumps.	2 electric-driven sewing machines.	1 Knowles triplex pump for hose testing.	1 16 by 10 speed lathe.
1 gas tire heater.		Numerous tools and appliances for repairing hose and harnesses.	1 15 horse power motor.	1 16 by 10 wood lathe.
1 tire upsetter.			2 dynamos and engines which supply current to fire alarm, central station.	1 26 by 26 planer, 8-foot bed.
1 punch and shears.				1 planer, 16 by 29, shaper.
1 lever shears.				1 radial drill.
1 tire roller.				2 upright drills.
2 rubber tire setters.				1 wall drill.
1 bolt cutter.				1 circular saw.
1 fan blower.				1 band saw.
				1 boring and mortiser machine.
				2 buzz planers.
				1 grindstone.
				Numerous small tools.

NUMBER OF RUNS EACH COMPANY HAD FROM 1 FEBRUARY, 1912, TO 1 FEBRUARY, 1913.

COMPANY.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	Totals.
Engine 1.....	19	20	18	21	50	38	15	14	16	13	18	25	267
Engine 2.....	7	8	4	7	11	17	4	7	8	5	6	10	94
Engine 3.....	27	34	24	29	52	38	30	23	22	28	32	28	367
Engine 4.....	51	43	40	34	58	62	35	45	39	37	56	37	537
Engine 5.....	37	25	19	21	33	44	32	15	22	11	19	13	291
Engine 6.....	56	45	40	35	52	59	30	42	38	33	52	40	522
Engine 7.....	18	26	15	20	27	28	23	13	16	10	24	17	237
Engine 8.....	31	36	37	23	52	51	26	32	31	28	31	21	399
Engine 9.....	40	31	24	24	41	52	35	15	25	11	22	15	335
Engine 10.....	36	32	21	18	27	30	17	18	17	21	39	26	302
Engine 11.....	32	24	16	17	33	41	30	13	14	8	14	11	253
Engine 12.....	16	16	22	26	52	45	23	19	24	24	24	21	312
Engine 13.....	20	26	23	25	59	59	19	17	25	29	31	22	355
Engine 14.....	17	23	15	24	41	57	33	21	31	35	34	34	365
Engine 15.....	31	25	21	30	58	47	29	22	25	18	20	29	355
Engine 16.....	5	4	14	13	22	11	5	5	8	7	19	7	120
Engine 17.....	14	26	16	14	35	29	16	15	26	21	36	24	272
Engine 18.....	12	22	17	14	30	23	10	20	30	24	34	23	259
Engine 19.....	5	13	15	8	17	14	3	5	13	10	18	7	128
Engine 20.....	1	7	6	10	18	16	4	3	5	7	8	2	87
Engine 21.....	18	23	25	28	46	37	16	17	25	20	33	22	310
Engine 22.....	36	35	34	31	49	41	27	20	24	29	36	31	393
Engine 23.....	25	18	21	23	56	41	29	27	26	28	33	25	352
Engine 24.....	15	20	24	16	30	38	17	22	32	27	20	19	280
Engine 25.....	19	27	19	14	26	31	35	14	14	17	19	19	254
Engine 26.....	45	43	30	29	46	54	36	26	28	34	45	35	451
Engine 27.....	18	20	29	14	38	28	18	11	16	15	22	13	242
Engine 28.....	9	13	12	16	20	32	16	12	11	22	20	17	200
Engine 29.....	12	7	10	10	10	15	9	4	6	11	17	10	121
Engine 30.....	2	7	6	5	9	20	6	5	19	3	7	10	99
Engine 31.....	6	11	10	6	10	18	4	5	4	2	6	8	90
Engine 32.....	11	14	23	13	32	31	13	10	14	16	20	9	206

Number of Runs of Each Company.—*Continued.*

COMPANY.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	Totals.
Engine 33.....	19	36	24	21	31	32	10	9	20	20	20	20	262
Engine 34.....	12	7	8	8	15	10	11	7	8	7	11	6	110
Engine 35.....	2	5	5	1	3	6	1	2	1	1	4	2	33
Engine 36.....	12	13	21	10	36	21	14	9	11	14	14	10	185
Engine 37.....	12	16	11	19	39	47	8	13	19	20	28	15	247
Engine 38.....	2	2	3	1	6	3	2	1	2	....	2	1	25
Engine 39.....	18	22	15	19	36	31	23	10	13	10	12	18	227
Engine 40.....	37	24	21	21	38	39	32	13	19	10	16	13	283
Engine 41.....	15	13	11	14	19	18	7	3	14	13	14	10	151
Engine 42.....	14	17	17	20	26	42	28	17	22	24	18	20	265
Engine 43.....	24	24	25	26	59	55	20	19	29	18	21	31	351
Engine 44.....	14	8	6	9	19	19	20	11	5	11	8	13	143
Engine 45.....	11	7	12	12	28	20	9	7	7	11	13	12	149
Engine 46.....	10	21	19	16	31	25	11	8	24	17	35	19	236
Engine 47.....	12	11	13	9	18	22	10	8	12	9	10	7	141
Engine 48.....	3	7	5	4	8	5	1	5	6	4	6	4	58
Hose 49.....	3	7	8	5	10	7	3	6	6	7	6	5	73
Ladder 1.....	54	39	43	35	57	63	35	46	41	40	62	40	555
Ladder 2.....	36	27	20	19	37	44	34	14	24	9	21	15	300
Ladder 3.....	36	34	22	32	50	30	32	22	23	29	28	26	364
Ladder 4.....	21	21	23	25	51	49	29	29	29	33	26	33	369
Ladder 5.....	18	19	16	21	51	43	16	16	16	14	17	25	272
Ladder 6.....	3	5	17	12	23	11	3	6	8	9	16	7	120
Ladder 7.....	17	26	22	16	43	28	15	18	29	29	36	27	306
Ladder 8.....	41	42	38	26	47	55	47	26	31	29	37	32	451
Ladder 9.....	14	15	22	14	34	28	12	10	16	18	17	11	211
Ladder 10.....	8	11	12	16	11	27	16	14	12	19	23	14	183
Ladder 11.....	12	9	8	11	9	12	8	5	6	11	13	8	112
Ladder 12.....	17	23	21	25	49	65	33	27	32	33	37	30	392
Ladder 13.....	35	39	30	28	43	38	40	23	25	31	46	29	407
Ladder 14.....	22	25	26	19	34	38	31	16	18	21	19	18	287
Ladder 15.....	18	32	15	16	19	16	9	6	14	18	16	16	195
Ladder 16.....	7	4	9	7	18	12	7	5	4	6	5	7	91
Ladder 17.....	22	38	17	19	26	31	21	18	23	17	25	27	284
Ladder 18.....	9	7	10	9	18	18	15	4	4	5	6	13	118
Ladder 19.....	15	13	9	12	23	17	8	10	10	9	14	14	154

Number of Runs of Each Company.—*Concluded.*

COMPANY.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	Totals.
Ladder 20.....	13	15	16	15	47	41	19	12	24	12	18	19	251
Ladder 21.....	32	24	16	15	30	39	29	10	13	7	13	10	238
Ladder 22.....	12	13	23	9	34	22	9	8	12	14	16	13	185
Ladder 23.....	20	30	27	16	41	27	15	22	30	26	32	29	315
Ladder 24.....	29	21	22	14	27	23	15	22	19	16	37	29	274
Ladder 25.....	2	1	3	2	2	11	4	1	3	1	4	4	38
Ladder 26.....	4	12	3	8	14	25	3	5	14	12	14	12	126
Ladder 27.....	2	8	5	15	26	18	8	3	10	9	15	8	127
Ladder 28.....	3	7	5	4	9	5	1	6	6	5	6	4	61
Ladder 29.....												5	5
Chemical 1.....	66	52	49	44	59	67	47	55	53	51	67	45	655
Chemical 2.....	44	44	26	34	49	47	36	31	28	35	42	42	458
Chemical 3.....	11	13	22	5	28	26	9	8	11	13	15	11	172
Chemical 4.....	27	22	23	25	38	22	30	19	22	28	37	24	317
Chemical 5.....	13	14	17	12	25	38	25	17	18	23	16	19	237
Chemical 6.....	13	12	8	9	12	17	6	5	10	11	14	10	127
Chemical 7.....	36	25	21	24	35	44	32	15	20	10	17	14	293
Chemical 8.....	26	18	19	29	58	45	17	20	23	17	19	28	319
Chemical 9.....	12	16	21	11	35	29	12	10	15	19	19	10	209
Chemical 10.....	15	15	13	20	37	42	21	21	23	22	26	19	274
Chemical 11.....	3	11	15	5	17	19	3	7	15	10	23	11	139
Chemical 12.....	15	18	12	18	38	50	20	16	24	21	26	19	277
Chemical 13.....	8	19	14	16	29	28	5	8	17	13	18	15	190
Chemical 14.....	6	9	12	8	10	12	4	5	20	7	9	8	110
Tower 1.....	7	5	6	4	8	9	10	5	2	4	12	5	77
Tower 2.....	7	3	4	6	11	2	7	2	3	6	7	2	60
Tower 3.....	5	9	8	4	9	8	13	2	4	4	6	8	80

EXPENDITURES FOR THE YEAR.

Headquarters.

Salaries	\$13,897 69
Printing	3,107 59
Stationery	1,209 56
Care of headquarters	602 40
Traveling expenses	514 61
Books, papers and office expenses,	288 64
Postage	140 86
Expert accountant services (1911-12)	75 00
Expert services (1911-12)	20 00

\$19,856 35

Fire Fighting Force.

Salaries	\$1,185,020 39
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Horses:

Hay, grain and straw	\$62,123 95
Shoeing	20,577 66
Purchase and exchange	13,121 40
Harnesses and repairs	8,231 22
Horse hire	646 00
	<hr/>
	104,700 23
Fuel for engines and houses	47,393 34
Hose, pipes and repairs	14,277 66
Supplies	12,696 70
Electric lighting	11,283 95
Furniture and bedding	\$8,292 01
Washing	1,453 52
	<hr/>
	9,745 53
Rents	5,269 50
Uniform cloth	3,073 18
Medical services	1,652 36
Gas	1,274 26
Hats, badges and buttons	1,139 89
Chemicals	956 99
Ice	496 50
Expenses detailed men	271 60
Hydrant repairs	260 19
Removing ashes from fireboat	183 76
Medical supplies	167 96
Refreshments for men at fires	53 35

Carried forward \$1,399,917 34 \$19,856 35

FIRE DEPARTMENT.

73

<i>Brought forward</i>	\$1,399,917 34	\$19,856 35
Freight	47 68	
Lessons in use of automobiles	15 00	
Advertising	12 60	
	<hr/>	1,399,992 62

Veterinary Hospital.

Attendants, medicines, etc.	8,533 50
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Repair Shop.

Pay rolls	\$53,198 53	
Materials, etc.	36,763 20	
Hardware and tools.	4,366 54	
Electric power	231 30	
	<hr/>	94,559 57

Fire Alarm Branch.

Salaries	\$52,281 52	
Instruments, tools and repairs	4,507 02	
Rent	1,800 00	
Telephone service	1,696 37	
Repairs, alterations and extensions,	1,263 26	
Electric power	942 46	
Wire, cables and conduits	852 78	
Use of duct in East Boston tunnel,	450 36	
Repairs to tower, Lyceum Hall,		
East Boston	440 88	
Car fares and traveling expenses,	338 10	
Electric light for clocks	290 83	
Maps and plans	246 09	
Repairing clocks	23 50	
Trimming trees	3 50	
Time service	3 16	
	<hr/>	65,139 83

Repairs of Houses.

Repairs and alterations	18,129 19
<i>Pensions</i>	111,843 37

New Apparatus.

Water tower	\$6,494 50	
Motor launch	625 00	
Automobile	575 00	
Twenty-seven extinguishers	367 60	
	<hr/>	8,062 10
		<hr/>
		<u>\$1,726,116 53</u>

SPECIAL APPROPRIATIONS.

Automobile Apparatus.

Combination chemical and hose car	\$5,500 00
Two chief's automobiles	1,970 00
Expert's services	454 45
Typewriting	62 50
Advertising	11 90
Traveling expenses	6 60
	<hr/>
	<u>\$8,005 45</u>

Fire Alarm Branch, Improvements.

Payments on account:

Boxes	\$6,009 55
Iron posts	3,386 50
Cables, wires, conduits, etc.	1,805 60
Connecting poles, etc.	1,510 04
Registers	1,100 00
Switch board	950 00
Plans	914 02
Lanterns	871 20
Painting boxes	702 00
Lumber	257 78
Advertising	8 00
	<hr/>
	<u>\$17,514 69</u>

Fireboat Quarters and Pier, Northern Avenue.

Continuation of payments:

Building contractor, Christopher F. Brown	\$15,743 02
Wharf and pier, Lawler Brothers	11,446 28
Architects, Maginnis & Walsh	1,025 45
Inspectors	364 00
Printing	189 36
Covering piping	147 00
Bitts and small items	116 31
Advertising	7 20
	<hr/>
	<u>\$29,038 62</u>

Fire Department Repair Shop, Construction.

Continuation of payments:

Water service pipes	\$358 30
Watchman's clock	355 50
Gates	279 00
Hose and small items	182 00
Masonry	93 78
	<hr/>
	<u>\$1,268 58</u>

Fire Station, Oak Square and Faneuil Section.

Continuation of payments:

Site, 9,889 square feet of land, Faneuil street .	\$3,461 15
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Building:

Contractor, McGahey & O'Connor	\$29,565 18
Architects, Maginnis & Walsh,	1,874 86
Gasolene tank	316 00
Printing	249 77
Conduits	162 00
Removing trees	26 13
Advertising	3 40
	<hr/>
	32,197 34
	<hr/>
	<u>\$35,658 49</u>

RECAPITULATION.

Fire Department (including headquarters, Veterinary Hospital and repair shop expenses)* .	\$1,522,942 04
Fire alarm branch	65,139 83
Repairs of houses	18,129 19
Pensions	111,843 37
New apparatus	8,062 10
Automobile apparatus	8,005 45
Fire alarm branch, improvements	17,514 69
Fireboat quarters and pier, Northern avenue .	29,038 62
Fire Department repair shop, construction .	1,268 58
Fire station, Oak square and Faneuil section .	35,658 49
	<hr/>
	<u>\$1,817,602 36</u>

INCOME.

Overpayment of salary	\$10 70
Juvenile court fees	16 65
Sale of one horse	40 00
Damage to hose	92 50
Damage to fire alarm cable	125 35
Sale of manure	227 00
Damage to fire alarm boxes	283 14
Sale of badges admitting to fire lines	319 00
Sale of old material	507 07
Permits for keeping, use and transportation of fireworks and explosives; fires in open air .	943 75
Bath Department, steam for Dover Street Bath House	3,700 00
	<hr/>
	<u>\$6,265 16</u>

* Of this amount \$3,700 is expended for coal used for the Bath Department, and is credited to the appropriation for the Fire Department.

ALARMS, FIRE LOSSES, AND INSURANCE.

MONTHS.	ALARMS RECEIVED.*						LOSS.		INSURANCE.		ALARMS.*						Confined to Building.	Extended to Others.	Not in Building.	Out of City.	Damage None.	Damage Slight.	Damage Considerable.	Totally Destroyed.	
	Members.	Police.	Citizens.	Telephone.	Automatic.	Unknown.	Total.	Buildings.	Contents.	Buildings.	Contents.	TELEGRAPH.				FIRE.									
												Fire.	False.	Needless.	Still.	Fire.									Needless.
January.....	22	20	336	76	12	1	467	\$260,417	\$181,931	\$4,148,189	\$1,226,650	214	2	27	178	46	374	8	16	2	174	186	22	...	
February.....	17	16	270	45	12	8	368	76,010	116,450	4,539,493	648,557	190	8	11	128	31	282	10	29	5	110	173	9	...	
March.....	8	15	270	88	10	14	405	112,973	265,907	2,621,142	787,130	191	13	11	166	24	280	7	75	2	135	145	7	...	
April.....	10	13	264	56	14	8	365	76,376	120,016	1,372,883	714,941	181	8	13	136	27	250	5	64	3	123	118	14	...	
May.....	9	17	240	78	12	10	366	69,800	107,098	2,729,844	1,467,850	163	10	14	156	23	255	7	59	5	125	131	6	...	
June.....	12	33	448	115	15	19	642	88,891	89,408	4,773,516	964,422	320	19	22	254	27	340	20	230	4	165	174	20	1	
July.....	22	35	430	143	27	22	679	119,909	143,186	4,342,425	682,694	318	24	9	289	39	351	6	254	2	195	150	10	2	
August.....	12	16	242	42	16	8	336	56,570	93,778	1,813,213	908,465	180	10	13	108	25	240	2	47	...	118	112	11	...	
September.....	9	10	216	52	15	12	314	34,855	58,537	1,759,330	468,350	149	13	17	103	32	203	3	47	2	104	94	8	...	
October.....	10	15	268	117	13	19	442	44,307	82,737	1,395,189	624,747	174	20	14	203	31	218	3	154	5	121	94	6	...	
November.....	9	14	266	75	13	14	391	50,068	72,339	1,502,218	2,758,735	167	14	11	162	37	252	1	75	2	143	102	7	1	
December.....	15	14	315	110	7	8	469	81,643	121,469	1,827,117	962,357	241	8	13	186	21	294	1	128	5	147	136	15	...	
Totals.....	155	218	3,565	997	166	143	5,244	\$1,071,879	\$1,452,886	\$32,824,559	\$12,214,898	2,488	149	175	2,069	363	3,339	73	1,178	37	1,660	1,615	135	4	

* Each fire is treated as having only one alarm.

† Does not include \$6,252 loss on vessels and contents with insurance of \$46,200.

CAUSES OF FIRES AND ALARMS FROM 1 JANUARY, 1912, TO 1 JANUARY, 1913.*

Alarms, false, needless, bell and still, and false automatic.....	682	Matches, careless use of, and set by rats.....	175
Alarms out of city.....	40	Meat, wood, on stove, in oven.....	20
Ashes, in wooden receptacle,	60	Naphtha, gasolene, benzine, chemicals, careless use of, and explosion.....	52
Automobiles.....	66	Oil stove, careless use of, and explosion.....	45
Boiling over of fat, tar, etc..	46	Overheated furnace, stove, boiler, steam pipes.....	114
Bonfires, rubbish, brush, grass.....	865	Plumber's, roofer's, painter's stove or torch.....	27
Careless use of lamp, candle, lantern.....	102	Rekindling of ruins.....	3
Careless use of matches, pipe, cigar, cigarette.....	539	Set by boys.....	148
Chimneys, soot burning....	220	Slacking of lime.....	6
Clothes near stove.....	29	Sparks from another fire....	9
Defective chimney, stove-pipe, boiler, furnace, fire-place.....	72	Sparks from chimney, furnace, stove, forge, boiler, grate.....	153
Defective gas pipe, stove, heater.....	18	Sparks from locomotive, engine.....	75
Electric wires, motors.....	100	Spontaneous combustion....	68
Fireworks and firecrackers..	41	Unknown.....	1,067
Friction, shafting, journals..	28	Water, gas pipe, thawing out,	81
Gas escaping and explosion..	4	Water back, bursting of....	8
Gas jet, stove, setting fire...	94		
Grease in ventilator, oven...	29		
Kerosene, lighting fire.....	8		
Lightning.....	5		
Incendiary and supposed....	62	Total.....	5,244
Lamp upsetting, explosion..	83		

1912.	FIRE EXTINGUISHED BY						
	Extinguishers.	Buckets of Water.	Chemical Engines.	Hydrant Streams.	Steamer.	Miscellaneous.	Citizens.
January.....	111	48	86	10	55	32	48
February.....	76	27	90	16	51	20	31
March.....	74	37	83	25	39	54	43
April.....	68	28	72	28	40	41	37
May.....	85	28	64	27	33	27	50
June.....	125	48	110	107	67	28	85
July.....	127	49	125	129	53	55	67
August.....	77	29	55	25	38	22	42
September.....	69	31	42	21	26	16	45
October.....	106	49	57	64	32	39	25
November.....	82	33	81	22	24	43	42
December.....	85	31	117	33	39	77	40
Totals.....	1,085	438	982	507	497	454	555

*Each fire is treated as having only one alarm.

FIRES WHERE LOSSES EXCEEDED \$15,000.

DATE.	Location and Owner.	Loss.
1912.		
Jan. 7.....	97 Hemenway street, T. E. Hollander.....	\$20,401
Jan. 9.....	91-93 Federal street, Globe-Wernicke Company.....	87,536
Jan. 14.....	189-191 State street, D. L. Slade Company.....	49,650
Jan. 16.....	Revere House, Bowdoin square, E. W. Harrison & Co....	94,719
Jan. 17.....	235 Forest Hills street, N. E. Moral Reform Society....	29,900
Feb. 1.....	9 Province court, M. J. O'Brien.....	18,202
March 2.....	210 State street, Atlantic Maritime Company.....	25,335
March 6.....	Brighton Abattoir, Brighton Packing Company.....	37,793
March 11.....	Clarendon street, Clarendon Street Baptist Church.....	46,768
March 27.....	97-99 Summer street, Consolidated Shirt Waist Company,	31,011
March 30.....	Brighton Abattoir, Brighton Packing Company.....	116,698
April 2.....	88-100 Blackstone street, American Paper Box Company,	17,567
April 9.....	190-192 Congress street, H. C. Hansen.....	57,123
April 15.....	47-51 Farnsworth street, National Lead Company.....	17,489
May 7.....	309 Huntington avenue, Associated Trust.....	23,462
May 22.....	786-790 Washington street, Linsky Brothers.....	36,692
June 13.....	36-40 Sudbury street, A. A. White.....	31,997
June 21.....	5-11 Bennett street, Ideal Leather Goods Company.....	16,910
July 5.....	Rear 494 Rutherford avenue, H. P. Hood & Sons.....	41,270
July 6.....	No. 2 House, Rutherford avenue, E. A. Gillette & Sons..	43,172
July 10.....	170 Border street, Federal Wharf & Trust Company.....	39,320
July 10.....	37 Southampton street, Greene Brothers Company.....	15,260
July 24.....	109 Kingston street, F. M. Batchelder & Co.....	28,734
Aug. 9.....	14-20 Oliver street, Welsbach Company.....	46,723
Sept. 22.....	67 Washington street, M. S. Kondazian.....	17,252
Oct. 23.....	185 Bay State Road, G. P. Hamlin.....	23,223
Oct. 23.....	105-119 Merrimac street, Dempsey & Co.....	21,316
Nov. 26.....	20-22 Beacon street, G. L. Shuman & Co.....	30,299
Dec. 9.....	366-370 Atlantic avenue, D. W. Sullivan & Co.....	24,455
Dec. 22.....	739-745 Washington street, Seward & Ford.....	25,740
Dec. 28.....	56-60 Denmark street, H. Green.....	16,583

STATISTICS.

Population, January 1, 1913	735,390
Area, square miles	47.34
Number of brick and stone buildings	28,456
Number of wooden buildings	67,961
Fires in brick and stone buildings	1,752
Fires in wooden buildings	1,587
Out of city	37
Not in building, false and needless	1,868
Total alarms	<u>5,244</u>

FIRE LOSS FOR THE YEAR ENDING 31 DECEMBER, 1912.

Buildings	\$1,071,879
Contents	1,452,886
Marine	6,252
Total	<u>\$2,531,017</u>

YEARLY LOSS FOR THE PAST FIFTEEN YEARS.

Year ending February 1, 1899	\$1,441,261
“ “ 1, 1900	1,630,149
“ “ 1, 1901	1,702,217
“ “ 1, 1902	1,830,719
“ “ 1, 1903	1,762,619
“ “ 1, 1904	1,674,333
“ “ 1, 1905	2,473,980
“ “ 1, 1906	2,130,146
“ “ 1, 1907	1,130,334
“ “ 1, 1908	2,268,074
“ “ 1, 1909	3,610,000
“ “ 1, 1910	1,680,245
“ “ 1, 1911 (11 months)	3,159,989
“ January 1, 1912	2,232,267
“ “ 1, 1913	2,531,017

NOTE.— January loss, 1911, amounting to \$165,001, deducted from previous year and included in calendar year January 1, 1911, to January 1, 1912.

ALARMS FOR THE PAST TEN YEARS.*

YEAR.	Bell.	Still and Automatic.	Totals.
1912.....	2,812	2,432	5,244
1911.....	2,291	2,142	4,433
1910 (11 months)†.....	1,864	1,801	3,665
1909.....	2,101	1,677	3,778
1908.....	2,210	1,700	3,910
1907.....	2,441	1,600	4,041
1906.....	1,687	1,262	2,949
1905.....	1,905	1,210	3,115
1904.....	1,580	1,159	2,739
1903.....	1,633	1,121	2,754

* Each fire is treated as having only one alarm.

† 202 bell and 196 still alarms deducted from year 1910-11 and included in calendar year January 1, 1911, to January 1, 1912.

BOX ALARMS BY DISTRICTS.*

District.	ALARMS, 1911.						District.	ALARMS, 1912.							
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.		Totals.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Totals.
1.....	198	3	1	1	.....	.....	203	1.....	292	4	1	.....	.....	.....	297
2.....	128	3	2	.....	.....	.....	133	2.....	183	5	2	.....	.....	.....	190
3.....	58	1	1	.....	.....	.....	60	3.....	70	7	4	1	.....	.....	82
4.....	363	4	2	1	.....	.....	370	4.....	470	11	4	4	.....	.....	489
5.....	96	1	.....	.....	.....	.....	97	5.....	124	4	.....	.....	.....	.....	128
6.....	155	3	2	2	.....	.....	162	6.....	246	7	1	.....	.....	.....	254
7.....	295	7	2	.....	.....	.....	304	7.....	293	3	1	.....	.....	.....	297
8.....	254	1	1	.....	.....	.....	256	8.....	280	2	2	1	.....	.....	285
9.....	235	2	1	.....	.....	.....	238	9.....	302	7	1	.....	.....	.....	310
10.....	168	4	3	.....	.....	.....	175	10.....	161	2	.....	.....	.....	.....	163
11.....	52	1	.....	.....	.....	.....	53	11.....	89	5	2	1	.....	.....	97
12.....	170	2	.....	.....	.....	.....	172	12.....	133	4	1	.....	.....	.....	138
13.....	.....	.....	.....	.....	.....	.....	.....	13.....	.....	.....	.....	.....	.....	.....	.....
14.....	129	1	.....	.....	.....	.....	130	14.....	125	1	.....	.....	.....	.....	126
.....	.....	.....	.....	.....	.....	.....	.....	15.....	69	.....	.....	.....	.....	.....	69
Totals.....	2,301	33	15	4	.....	.....	2,353	Totals.....	2,837	62	19	7	.....	.....	2,925

* Each fire is treated as having only one alarm.

ROLL OF MERIT, BOSTON FIRE DEPARTMENT.

Timothy J. Heffron, Lieutenant, retired.

James E. Downey, Hoseman, retired.

Frederick F. Leary, Lieutenant, Engine Company
26-35.

Florence Donoghue, Ladderman, Ladder Company 15.

James F. McMahon, Captain, Ladder Company 2.

Martin A. Kenealy, Captain, Engine Company 43.

Denis Driscoll, Lieutenant, Engine Company 14.

William H. Magner, Lieutenant, Ladder Company 26.

Thomas J. Muldoon, Lieutenant, Engine Company 18.

Joseph P. Hanton, Ladderman, Ladder Company 17.

Michael J. Teehan, Lieutenant, Engine Company 7.

Charles W. Conway, Captain, Engine Company 37.

Michael J. Dacey, Lieutenant, Ladder Company 20.

Patrick E. Keyes, District Chief, retired.

Thomas H. Downey, Lieutenant, Engine Company 4.

BOSTON FIREMEN'S RELIEF FUND.

RECEIPTS.

September 1, 1911, balance from previous year . .	\$4,928 68
Net proceeds from Department Ball, February 14, 1912	14,278 21
Interest on bonds	8,580 00
Interest on deposits	120 91
Donations	926 00
City of Boston bond matured	6,000 00
Total	<u>\$34,833 80</u>

DISBURSEMENTS.

Benefits to members and gratuities	\$16,509 77
Treasurer's bond	62 50
Salaries	400 00
Box, International Trust Company vaults	10 00
Printing, stationery, postage, desks, etc.	234 25
Free beds, Massachusetts General and Carney Hospitals	400 00
Bonds purchased	12,308 36
Auditing books of "Fund" for 2 $\frac{1}{2}$ years	129 17
Certificate of deposit purchased, American Trust Company	2,000 00
	<u>\$32,054 05</u>
Balance cash in bank	2,779 75
	<u>\$34,833 80</u>

ASSETS, 1 SEPTEMBER, 1912.

\$137,000 00 City of Boston 3 $\frac{1}{2}$ per cent bonds.	
88,000 00 City of Boston 4 per cent bonds.	
8,000 00 C. B. & Q. R. R. 4 per cent bonds.	
2,000 00 certificate of deposit American Trust Company.	
2,779 75 cash on deposit.	
	<u>\$237,779 75</u>

Respectfully submitted,

JOHN WILLIAMS,

Treasurer.

DONATIONS.

Nov. 24, 1911.	Oriental Tea Company . . .	\$100 00
Jan. 2, 1912.	Howard Stockton . . .	5 00
Jan. 11, 1912.	Carter, Rice & Co. . .	100 00
Jan. 11, 1912.	L. J. Muttly Company . . .	100 00
Jan. 13, 1912.	Edward E. Babb & Co. . .	100 00
Jan. 13, 1912.	Fred M. Bachelder & Co. . .	50 00
Jan. 20, 1912.	Lockwood, Green & Co. . .	100 00
Feb. 6, 1912.	D. & L. Slade Company . .	100 00
Feb. 10, 1912.	Henry N. Marr . . .	25 00
April 6, 1912.	E. Stoddard & Son . . .	5 00
April 12, 1912.	The Arnold Roberts Company .	25 00
May 10, 1912.	Felton & Son, Incorporated .	200 00
May 27, 1912.	Sarah P. Joslin, Oxford, Mass. .	15 00
June 16, 1912.	Josephine Elliott . . .	1 00
Total		<u>\$926 00</u>

JOHN WILLIAMS,
Treasurer.

CHANGES FROM 1 FEBRUARY, 1912, TO 1 FEBRUARY, 1913.

Number of men appointed to fire force	89
Number of men reappointed	3
All others	10
Number of men dishonorably discharged	5
Number of men dropped	27
Number of men honorably discharged	1
Number of men resigned	18
Number of men pensioned	22
Number of men who have died	7
Number of pensioners who have died	8

MEMBERS PENSIONED FROM 1 FEBRUARY, 1912, TO 1 FEBRUARY, 1913.

James M. Reed (U. S.).	James F. Bailey.
Elizabeth J. Dineen (Acts 1912).	Peter A. Matthews, Lieut.
Philip G. Flynn, Lieut.	David J. O'Connell.
Joseph H. E. Brown.	William T. McCormack.
Martin J. Mullen (Acts 1912).	Albert M. Laskey.
William C. Greeley, Lieut.	George C. Swift.
Thomas H. Wright (U. S.).	Frank Turnbull.
Frederick W. Hayes.	Thomas H. Weltch, Captain.
Charles E. Turner (Acts 1912).	John T. Weston.
L. A. Withington (Acts 1912).	John I. Quigley.
F. L. Fratus (Acts 1912).	Edward R. Stern.

DEATHS FROM 1 FEBRUARY, 1912, TO 1 FEBRUARY, 1913.

Active Force.

Leroy James	Ladder 13
C. Ambrose Glennon	Ladder 15
Philip T. Smith	Ladder 14
William H. Clay	Engine 30
Robert A. Ritchie, District Chief	District 13
James F. McKirn	Chemical 9
Michael D. Greene, Lieutenant	Engine 33

Pensioners.

William A. McLean.	N. L. Hussey.
George W. Brown.	Edwin A. Smith.
John D. Gallagher.	John H. Murray.
Thomas H. Evans.	John E. McGowan.

PROMOTION.

Under the rules of the Civil Service Commission, adopted 18 July, 1913, promotions in the Boston Fire Department will be made hereafter only after competitive examination under the following regulations:

Civil Service Regulations, 66.

(a.) Promotions in the Fire Department of the City of Boston shall be made only after open competitive examination, and by successive grades so far as practicable; such examinations to be open to all members of the grade from which the promotion is to be made who possess the qualifications as to time and nature of service fixed by the commission.

(b.) Competitive promotion examinations will be held from time to time, as often as may be necessary, to meet or to anticipate the needs of the higher grades; and due notice will be given by the commission as to the dates of such examinations and the qualifications required of candidates.

(c.) Persons qualified and who desire to take such promotion examinations shall file notice thereof with the commission at such times as it will fix.

(d.) Candidates for such promotion examinations will be marked on the following subjects: (1) Seniority or length of service; (2) Efficiency and record in the department; (3) Physical condition; (4) Knowledge of duties and of the law, and such other subjects as the commission may prescribe.

(e.) As the result of such competitive promotion examinations the commission will establish promotion lists; and whenever a promotion is to be made it will certify, upon requisition of the appointing officer, the names of the two persons standing highest on the promotion list; and one of such persons so certified shall be entitled to promotion, unless the appointing officer shall, upon written charges filed with the commission, satisfy it that an additional name should be certified.

(f.) No recommendation for the promotion of any member of the department shall be considered by the appointing officer unless it be made by the official or officials under whose immediate supervision such member has served; and such recommendation by any other person, if made with the knowledge and consent of the member serving, shall be sufficient cause for debarring him from the promotion proposed.

(g.) No person shall remain eligible for promotion for more than two years upon any promotion list unless the commission shall by vote continue the eligibility beyond such period.

(h.) If the candidates for promotion to any position shall be less than three (3) in number, the commission may assent to the promotion of a candidate nominated by the appointing officer, after the passing by said candidate of a suitable noncompetitive examination.

(i.) The weights for the various subjects in competitive promotion examinations shall be as follows:

Seniority or length of service	5
Efficiency or record in the department	8
Knowledge of duties and of law and other prescribed subjects	6
Physical condition	1

20

NOTE.— The New York City weights (*see* Civil Service Rule 15, Sect. 6) are:

Seniority	20
Conduct and efficiency	40
Written papers	40
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	100
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(j.) Credit on the subject of seniority shall be given only for the length of service in the grade in which the candidate is serving (as shown by the records) at the time of the promotion examination, and for which he seeks promotion, and shall be as follows:

The minimum mark shall be 50 per cent.

Three per cent shall be added for each full year of the first ten years of service.

One per cent shall be added for each full subsequent year.

NOTE.— The above is substantially the Chicago rule (*see* Civil Service Rule 7, Sect. 7). In New York (Civil Service Rule 15, Sect. 6) the maximum term of service in a position of grade to be considered in the rating for seniority is 15 years.

(k.) Credit on the subject of efficiency and record in the department will be based on two factors:

(1.) The candidate's qualifications of judgment, coolness, courage, executive ability, capacity for command of men, etc., the candidate's mark on examination to be based on the judgment of the Fire Commissioner filed in writing with the commission.

(2.) The candidate's record as shown on the official files of the Fire Department, including both merits and demerits.

Text-books used in examinations:

1. General and special orders referring to administration and fire service.
2. Annual reports concerning personnel and organization.
3. Department regulations.
4. Buildings, boxes, hydrants, apparatus routes, etc., of their district.
5. Equipment of apparatus.
6. Fire methods.

Additional for senior officers:

Ordinances and statutes relative to the Fire Department.

Publications, such as the "Crosby-Fiske Handbook of Fire Protection" and the "National Board of Fire Underwriters' Reports."

Possible cases of large fires within their districts and how they shall be handled.

